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OF THE

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FIFTH ANNUAL MEETING

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Dr. Charles B. Neal	Millville, N. J.
Dr. H. H. Nelden	Stanhope, N. J.
Dr. Geo. B. Nichols	San Luis Obispo, Cal.
Dr. W. M. Nihiser	Keedysville, Md.
Dr. Arthur Noble	Winchester, O.
Dr. E. M. Nolan	Jacksonville, Fla.
Dr. Chas. H. Norred	315 Synd. Arc. Minneapolis, Minn.
Dr. F. T. Nye	Beloit, Wis.
Dr. C. E. Nystrum	Medford, Wis.

O

Dr. James Oettiker	Platteville, Wis.
Dr. B. A. O'Hara	Waterbury, Conn.
*Dr. Eugene D. O'Neill	Biddeford, Me.
Dr. E. D. Olmsted	Spokane, Wash.
Dr. J. A. Osborne	Pittsboro, Ind.
Dr. Wm. Overman	Salem, Ind.

P

Dr. F. H. Packard	West Paris, Me.
Dr. Edward J. Page	Oakland, Ore.
Dr. S. N. Page	Kenton, Tenn.
Dr. A. P. N. Painter	Kittanning, Penn.

Dr. J. Walter Park	Harrisburg, Penn.
Dr. Wm. P. Parks	Mena, Ark.
Dr. A. W. Parsons	Box 2014, City of Mexico, Mexico.
Dr. W. H. Parsons	Damariscotta, Me.
Dr. L. G. Patty	Carroll, Ia.
Dr. Fenner H. Peckham	176 Benefit St., Providence, R. I.
Dr. George M. Pell	Carbon, Ind.
Dr. Walter Penquite	Chickasha, I. Ter.
Dr. Chas. H. Perry	Oneida, N. Y.
Dr. John D. Pfister	Fernridge, Mo.
Dr. J. R. Philson	Racine, O.
Dr. S. S. C. Phippen	Owasso, Mich.
Dr. Thos. E. Pickett	Maysville, Ky.
Dr. A. M. Pierce	West Elizabeth, Penn.
Dr. J. Harris Pierpont	Pensacola, Fla.
Dr. John Porter	McKeesport, Pa.
Dr. Martin L. Porter	Danforth, Me.
Dr. B. H. Portuondo	Belleville, Ill.
Dr. Byron B. Potter	Lancaster, Mo.
Dr. William Warren Potter	Buffalo, N. Y.
Dr. J. Wilson Poucher	Poughkeepsie, N. Y.
Dr. Trimble Pratt	Media, Pa.
Dr. C. W. Price	Richmond, Me.
Dr. J. Tom Price	Harrodsburg, Ky.

Q

Dr. John J. Quirk	103 State St., Chicago, Ill.

R

Dr. John M. Rains	Willmar, Minn.
Dr. Isaac E. Randall	W. Bay City, Mich
Dr. E. C. Rankin	McLouth, Kan.
Dr. W. H. Rees	Pleasanton, Kan.
Dr. Wm. S. Reily	Red Oak, Ia.
Dr. F. J. Resseguie	Saratoga, N. Y.
Dr. F. T. Reyling	1004 Oak St., Kansas City, Mo.
Dr. Walter Reynolds	Atlantic City, N. J.
Dr. C. M. Rice	Newton Falls, O.
Dr. J. H. Rice	Quincy, Ill.
Dr. Bruce Richardson	Beaumont, Tex.
Dr. W. J. Richardson	Fairmont, Minn.
Dr. W. S. Richardson	Williamsport, Md.
Dr. Nelson G. Richmond	Fredonia, N. Y.
Dr. H. R. Riddle	Mechanicsburg, Ill.
*Dr. Wheelock Rider	Rochester, N. Y.
Dr. C. O. Robinson	Blair, Neb.
Dr. Daniel A. Robinson	Bangor, Me.
Dr. D. C. Rodenhurst	Philadelphia, N. Y.
Dr. J. F. Rodgers	Bowling Green, Ky.

Dr. John F. Roe	Salida, Col.
Dr. Albert Clark Rogers	Los Angeles, Cal.
Dr. C. A. Rogers	Bakersfield, Cal.
Dr. J. H. Roll	Hamilton, O.
Dr. Samuel T. Roman	Conowingo, Md.
Dr. Carroll B. Ross	W. Rutland, Vt.
Dr. Charles Rosewater	222 Bee Bld'g., Omaha, Neb.
Dr. Samuel B. Rowe	Rolla, Mo.
Dr. Montgomery Russell	Seattle, Wash.

S

Dr. Allen Salter	Lena, Ill.
*Dr. J. T. Sanborn	Waldoboro, Me.
Dr. August Sander	Marblehill, Mo.
*Dr. Wilbur T. Sarles	Sparta, Wis.
Dr. Joseph Schneider	Milwaukee, Wis.
Dr. Chas. H. Schoff	Media, Pa.
Dr. W. F. Scott	Somerset, Ky.
Dr. John D. Scouller	Pontiac, Ill.
Dr. N. C. Scudder	Rome, N. Y.
Dr. Ira W. Seybold	Poplarbluff, Mo.
Dr. H. E. Sharrer	Hammond, Ind.
Dr. W. F. Sharrer	Delphi, Ind.
Dr. O. W. Sherwin	Woodstock, Vt.
Dr. Ernest Shellito	Marcellus, Mich.
Dr. A. W. Shelley	Port Royal, Pa.
Dr. James H. Shorter	Macon, Ga.
Dr. I. E. Shute	Opelousas, La.
Dr. R. J. Simon	Bloomdale, O.
Dr. Frank E. Sleeper	Sabbatus, Me.
Dr. W. J. Smathers	Dubois, Penn.
Dr. A. G. Smith	Oskaloosa, Kan.
Dr. Eugene R. Smith	Toledo, Ia.
Dr. A. R. G. Smith	N. Whitefield, Me.
Dr. F. R. Smith	Little River, Kan.
Dr. Geo. H. Smith	Holyoke, Mass.
*Dr. Thos. Franklin Smith	264 Lenox Ave., New York, N. Y.
Dr. Wm. M. Smith	Springfield, Mo.
Dr. L. R. Souder	Atlantic City, N. J.
Dr. James A. Spalding	627 Congress St., Portland, Me.
Dr. W. M. Spear	Rockland, Me.
Dr. Horace M. Starkey	70 State St., Chicago, Ill.
Dr. Nathan P. Stauffer	4833 Balto. Ave., Philadelphia, Pa.
*Dr. A. R. Stealy	Charlotte, Mich.
Dr. Wm. N. Stein	Shenandoah, Penn.
Dr. Cyrus L. Stevens	Athens, Penn.
*Dr. Geo. B. Stevens	444 Warren St., Roxbury, Mass.
Dr. Charles F. Stewart	Auburn, Neb.
Dr. Henry Stewart	Gettysburg, Penn.

Dr. George A. Stickney	Beverly, Mass.
Dr. P. Elwood Stigers	Hancock, Md.
Dr. Geo. M. Stiles	Williamstown, Pa.
Dr. Hamilton Stillson	8 Hinckley B'ld'g., Seattle, Wash.
Dr. J. O. Stillson	445 N. Penn. St., Indianapolis, Ind.
Dr. A. W. Stinchfield	Rochester, Minn.
*Dr. Charles A. Stimson	Eaton Rapids, Mich.
*Dr. Frederick R. Stoddard	Shelburne, Vt.
Dr. J. K. Stockwell	Oswego, N. Y.
Dr. Wm. Storey	Castalia, O.
Dr. Wm. M. Stover	San Luis Obispo, Cal.
Dr. H. M. Stowe	4433 Lake Ave., Chicago, Ill.
Dr. A. M. Straight	Bradford, Penn.
Dr. George M. Straight	Winchester, Ill.
Dr. N. W. R. Straw	Portland, Me.
Dr. D. H. Strickland	Erie, Penn.
Dr. O. C. Strong	Colden, N. Y.
*Dr. Benjamin F. Sturgis	Auburn, Me.
*Dr. John I. Sturgis	New Gloucester, Me.
Dr. Paul U. Sunderland	Danbury, Conn.

T

Dr. G. Lane Taneyhill	Baltimore, Md.
Dr. J. J. Terhune	169 Adelphi St., Brooklyn, N. Y.
Dr. Frederick Terrell	San Antonio, Tex.
Dr. T. M. Throckmorton	Chariton, Ia.
Dr. C. H. Towlerton	Lyons, N. Y.
*Dr. A. M. Tracy	Hudson, N. Y.
Dr. Walter P. Trimbath	Everett, Pa.
Dr. J. D. Tripp,	Auburn, N. Y.
Dr. A. R. Tucker	Noblesville, Ind.
Dr. A. Jackson Tucker	Sedalia, Mo.
Dr. H. W. Tuttle	Adrian, Mo.
Dr. J. B. Tweedle	Weatherly, Pa.
Dr. B. E. Twitchell	Belleville, Ill.

V

Dr. Wm. B. Van Note	Lima, O.
Dr. John Van Rensselaer	2 Thomas Circle, Washington, D. C.

W

Dr. Emil Wahl	475 Grove St., Milwaukee, Wis.
Dr. William F. Waite	Kansas City, Kan.
Dr. R. A. Walker	West Monterey, Pa.
Dr. H. Jackson Wall	Richland Center, Wis.
Dr. G. M. Wallace	Ormond, Fla.
*Dr. J. S. Wallace	Brunswick, Mo.
Dr. J. H. Walling	Falkville, Ala.
Dr. H. B. Walter	Harrisburg, Penn.
Dr. Lyman Ware	31 Washington St., Chicago, Ill.

Dr. A. D. Warner	Burton, O.
Dr. C. J. Walton	Munfordville, Ky.
Dr. Eugene Way	Dennisville, N. J.
Dr. J. M. Weaver	Dayton, O.
Dr. C. W. Webb	Wellsboro, Penn.
Dr. C. A. Wells	Quincy, Ill.
Dr. J. B. Wescott	Bath, Me.
Dr. John E. West	Jersey City, N. J.
Dr. Arthur B. Wetherell	Holyoke, Mass.
*Dr. Hannibal P. Wheatley	Farmington, N. H.
*Dr. H. H. Whitcomb	Norristown, Penn.
Dr. C. B. White	Fitzgerald, Ga.
Dr. J. A. White	200 E. Franklin St., Richmond, Va.
Dr. J. W. C. White	Plankington, S. D.
Dr. P. P. White	Williamsville, Vt.
Dr. Chas. Whitehead	Newaygo, Mich.
Dr. Geo. W. Whitney	Auburn, N. Y.
Dr. Dorvil M. Wilcox	Lee, Mass.
Dr. C. F. Wilhelmj	E. St. Louis, Ill.
Dr. E. S. Willard	Watertown, N. Y.
Dr. W. F. Williams	Desarc, Ark.
Dr. Chas Williamson	Washington, Kan.
Dr. H. N. Willis	Pocomoke City, Md.
Dr. Albert R. Wilson	Greensboro, N. C.
Dr. Daniel C. Wilson	Maryville, Mo.
Dr. F. M. Wilson	Bartow, Fla.
Dr. J. H. Wilson	Bellefontaine, O.
Dr. Nelson W. Wilson	49 Niagara St., Buffalo, N. Y.
Dr. S. M. Wilson	Bridgeton, N. J.
Dr. C. M. Witmer	Marble Hill, Mo.
Dr. J. E. Wood	Elizabeth City, N. C.
Dr. Horatio Woodbury	South Paris, Me.
Dr. Lafayette Woodruff	2805 W. Broad St., Columbus, O.
Dr. Lewis K. Woodward	Westminster, Md.
*Dr. D. S. Woodworth	Fitchburg, Mass.
*Dr. Lafayette Woodruff	Devall Bluff, Ark.
Dr. Charles E. Woody	Springville, Mo.
Dr. S. W. Woodyard	Greeneville, Tenn.
Dr. Frank Worden	N. Alton, Ill.
Dr. James H. Wright	New Lexington, O.
Dr. D. Baldwin Wylie	Milwaukee, Wis.

Y

Dr. A. L. Yocum	Chariton, Ia.
*Dr. L. J. Young	Haverhill, Mass.

Z

Dr. A. W. Zillman	Indian Grove, Mo.

CONSTITUTION

ARTICLE I.

NAME.

The name of this Association shall be THE NATIONAL ASSOCIATION OF UNITED STATES PENSION EXAMINING SURGEONS.

ARTICLE II.

OBJECTS.

The objects of this Association shall be the improvement of those special branches of the science and art of medicine and surgery which are involved in the performance of the duties of Pension Examining Surgeons and the cultivation of cordial relations between the members.

ARTICLE III.

ADMISSION OF MEMBERS.

Any Pension Examining Surgeon wishing to become a member of this Association shall make written application to the Treasurer, accompanied by his dues, and at the annual meeting his name shall be referred to the Executive Committee, on whose favorable report as to his eligibility he shall be declared a member.

ARTICLE IV.

MEMBERS.

The members of this Association shall be of two classes, namely, active members and honorary members.

Active members shall be physicians who, at the time of their affiliation with the Association, are United States Pension Examining Surgeons in good standing. Active members alone shall have the right to vote and to hold office.

Honorary members, after having been proposed by the Executive Committee, may be elected by a two-thirds vote of the Association in annual meeting. Their number shall at no time exceed a proportion of one honorary to fifty active members.

ARTICLE V.

OFFICERS.

The officers of this Association shall be a President, a First, a Second, a Third and a Fourth Vice-President, a Secretary and a Treasurer.

ARTICLE VI.

ELECTION AND TERM OF OFFICERS.

The officers of this Association shall be elected annually, by ballot. They shall hold office for one year and until their successors are elected.

ARTICLE VII.

DUTIES OF THE PRESIDENT.

The President shall preside at the meetings of the Association, shall conduct the meetings in accordance with commonly accepted rules of parliamentary procedure, shall deliver, at the close of his term of office, an address before the Association, and shall perform such other duties as the Association may direct.

ARTICLE VIII.

DUTIES OF THE VICE-PRESIDENTS.

In the absence, or at the request of the President, a Vice-President, precedence according with numerical order, shall at the annual meeting, assume the duties of the President.

ARTICLE IX.

DUTIES OF THE SECRETARY.

The Secretary shall keep the minutes of the Association, shall give due notice to members of the time and place of the meetings, shall have charge of the publication and distribution of the transactions of the Association, shall submit a report at the annual meeting, and shall perform such other duties as may be directed by the Association.

ARTICLE X.

DUTIES OF THE TREASURER.

The Treasurer shall have custody of all funds of the Association, shall keep an accurate account of all receipts and disbursements, shall present at the annual meeting a report on the finances of the Association, and shall perform such other duties as the Association may direct. The Treasurer shall furnish a bond, approved by the President, for $1,000.00.

ARTICLE XI.

EXECUTIVE COMMITTEE.

There shall be an Executive Committee of twelve, consisting of the President, the Secretary and the Treasurer as members *ex officio*, and nine appointed members.

ARTICLE XII.

DUTIES OF EXECUTIVE COMMITTEE.

The Executive Committee shall manage the affairs of the Association in the interim between annual meetings. It shall suggest to the Association at each annual meeting, the time and place for the next annual meeting. If, after the adjournment of the annual meeting, circumstances make it necessary to change the time and place of the next annual meeting, the Executive Committee shall have power to make such change.

It shall also be the duty of the Executive Committee to present to the Association, at its annual meeting, a list of nominations for officers. If the Committee are not unanimous in favor of any nomination, the two names having the largest number of votes in the Committee shall be submitted to the Association. The Executive Committee shall pass upon the eligibility of all applicants for membership.

In the interim between annual meetings a vote of the Executive Committee may be taken by mail when so requested by any three members of the Committee, the request to be transmitted to the President, who shall call for the vote.

The Executive Committee shall, at the close of each annual meeting of the Association, elect its own President and Secretary, to serve for one year. Vacancies made in the Executive Committee by the death or resignation of any of its members shall be filled by vote of the Committee.

ARTICLE XIII.

TERM OF MEMBERS OF EXECUTIVE COMMITTEE.

The appointed members of the Executive Committee shall serve for three years, three being appointed by the incoming President each year.

ARTICLE XIV.

PROGRAM COMMITTEE.

There shall be a committee of three, consisting of the President, the Secretary and the Treasurer to secure and pass upon papers to be read at the annual meeting.

ARTICLE XV.

DUES.

Each active member of this Association shall pay to the Treasurer two dollars annually. These dues shall be payable before each annual meeting, and any member whose dues are unpaid shall have no vote at the annual meeting, nor shall he receive a copy of the Transactions of the Association. Any member who shall be two years in arrears for dues shall, after notification by the Treasurer of his indebtedness, forfeit his membership in default of payment.

ARTICLE XVI.

QUORUM.

Twenty members shall constitute a quorum at any meeting of this Association.

ARTICLE XVII.

MEETINGS.

This Association shall hold one meeting each year.

ARTICLE XVIII.

AMENDMENTS.

The Constitution may be amended by two-thirds vote of the members present at any annual meeting, providing the proposed amendment shall have been presented in writing at the previous annual meeting.

Minutes of the Fifth Annual Meeting

Boston, Mass., June 4 and 5, 1906.

The Association met in the hall of the New American Hotel, Boston, Mass., at 10 a. m., June 4th, with the President, Dr. Charles J. Fox, of Hartford, Conn., in the chair.

The President suggested that unless objection was made, the minutes of the last Convention, as printed in the third volume of the Transactions, be accepted and adopted. No objection being made he declared the minutes so printed, adopted.

The Secretary then read his report for the year just ended.

The Treasurer, Dr. Chas. H. Glidden, then read his report and asked for the appointment of an auditing committee to examine his accounts. The chair appointed as auditing committee Dr. Thos. Franklin Smith and Dr. L. J. Gibbs.

The Secretary then read a letter written by one of our Vice Presidents, Dr. C. V. Cross, of San Francisco. This letter was addressed to a brother of Dr. Cross living in Dallas, Texas, and was printed in The Dallas Morning News. Dr. Cross had caused it to be sent to the Secretary in response to his request for some account of his experiences during the recent earthquake and fire, and of his relief labors since the calamity. This letter will be found spread on the pages of our Transactions. It was listened to with great interest and at its close the Convention expressed its sympathy with Dr. Cross by a rising vote. On motion of Dr. Farley, the Secretary was directed to send to Dr. Cross the three volumes of the Association Transactions, to replace those lost in the fire.

Medical Referee Sam Houston then addressed the Association. He congratulated it on its success. The Pension Bureau, he said, was much interested in the progress and work of the Association. He assured the members that the Pension Office was ready and intended now to throw its influence more decided-

ly than ever in helping to increase our membership and render the occasions of our annual meetings more interesting. With these objects in view he expressed the very strong hope that the Association would meet next year in Washington, D. C. He suggested that he intended to interest the office force of the Pension Bureau and through their co-operation arrange excursions and other social functions with a view to make the occasion of our annual convention more enjoyable than ever before. He related a test which he had lately caused to be made as to the comparative merit of the certificates sent in from boards whose members belong to the Association and those from boards whose members have never joined our Association. The test applied to thirty consecutive certificates received from members of the Association and thirty others coming in concurrently from boards not members. The result, he said, was astonishingly in favor of the series coming from Association members. It was very largely the showing made by this test which confirmed him in his determination to aid by every means in his power the efforts of the Association to increase its membership and usefulness.

Dr. Wm. A. Howe moved that a committee on Necrology be appointed to present resolutions and prepare suitable obituary notices of those of our members who have died during the past year. Carried. The chair appointed as such committee, Dr. Wm. A. Howe, of Phelps, N. Y., and Dr. H. H. Whitcomb, of Norristown, Pa.

Dr. Francis W. Palfrey, of Boston, then read a paper entitled "Recent Advances in our Knowledge of the Heart, with Special Reference to Senile Degeneration."

Dr. J. Sutcliffe Hill moved that the thanks of the Association be extended to Dr. Palfrey in acknowledgment of his courtesy in appearing and reading before us his very interesting paper. Carried unanimously. Some discussion followed the reading of this paper, after which Dr. S. Clifford Cox read a paper on the subject of "Supernumerary Patellæ." It was the report of a case which came before the board in Washington of which Dr. Cox is a member. The paper was illustrated by the exhibition of skiagraphs.

After the discussion which followed the reading of Dr. Cox's paper the Association adjourned to Tuesday afternoon at 2 o'clock. This adjournment was in order to permit our members to attend the opening exercises of the Convention of the American Medical Association to be held at ten o'clock, Tuesday morning, June 5th in the Hall of the Mechanics' Association.

MEETING OF THE EXECUTIVE COMMITTEE.

The Executive Committee met in the room of Dr. Glidden at the American Hotel at 9 o'clock, a. m., Tuesday, June 5th. There were present: Dr. Chas. J. Fox, Dr. Chas. H. Glidden, Dr. Porter Farley, Dr. L. J. Gibbs, and Dr. Wheelock Rider, and by invitation Dr. Sam Houston, the Medical Referee. Dr. L. J. Gibbs was chosen chairman and Dr. Chas J. Fox, Secretary of the Committee.

Dr. Houston addressed the Committee along the same line with his remarks made yesterday before the Association, but emphasizing more strongly the advisability of making Washington our next place of meeting, and promising to exert himself to introduce during our next Convention certain social features which have never before formed part of our program.

Dr. Fox moved that Washington be named as the next place of meeting, subject to change by the Executive Committee in case any unforseen reason for doing so should arise. Dr. Fox's motion was carried.

The Committee then took up the consideration of nominations for officers during the ensuing year. After much discussion and careful canvassing of names the following list was unanimously agreed upon for presentation to the Association at the election to be held in the afternoon of the same day.

President, Dr. Wheelock Rider, Rochester, N. Y.

First Vice President, Dr. J. Sutcliffe Hill, Bellows Falls, Vt.

Second Vice President, Dr. Thomas C. Baird, Kansas City, Mo.

Third Vice President, Dr. S. Clifford Cox, Washington, D. C.

Fourth Vice President, Dr. Cyrus L. Stevens, Athens, Pa.

Secretary, Dr. Porter Farley, Rochester, N. Y.

Treasurer, Dr. Charles H. Glidden, Little Falls, N. Y.

The Executive Committee then adjourned.

AFTERNOON SESSION.

The Association met at 2 p. m., the President, Dr. Fox, in the chair. Dr. Wm. A. Howe, chairman of the Committee on Necrology, read a preliminary report and offered a series of resolutions which will be found in our Transactions.

Dr. L. J. Gibbs, of the Committee on Treasurer's Accounts, then read their report.

Hon. Vespasian Warner, Commissioner of Pensions, was elected an honorary member of the Association.

Dr. Porter Farley, of Rochester, N. Y., then read a paper entitled "Disease a Process in the Interest of Health."

Dr. Edwin Bentley, of Little Rock, Ark., then read a paper entitled "Methods in the Examination of Applicants for Pensions."

Dr. Sam Houston, Medical Referee, was called for by the chair and again addressed the Association.

A vote of thanks was unanimously passed thanking Dr. Houston for the interest which he had manifested in the Association by attending its Conventions and so actively exerting himself to promote its welfare.

The President, Dr. Charles J. Fox, then read his address.

The Association then proceeded to the election of officers for the ensuing year. The Executive Committee presented its report on nominations as above set forth in the minutes of the committee meeting held that morning.

Dr. Rider stated that these nominations were only advisory and that any member was at perfect liberty to make other nominations from the floor. No other nominations were offered and on motion it was voted that the Secretary cast one ballot for the names offered by the nominating committee. The Secretary did so and handed the list to the President who declared the following to be elected as officers for the ensuing year:

President, Dr. Wheelock Rider, Rochester, N. Y.

First Vice President, Dr. J. Sutcliffe Hill, Bellows Falls, Vt.

Second Vice President, Dr. Thomas C. Baird, Kansas City, Mo.

Third Vice President, Dr. S. Clifford Cox, Washington, D. C.

Fourth Vice President, Dr. Cyrus L. Stevens, Athens, Pa.

Secretary, Dr. Porter Farley, Rochester, N. Y.

Treasurer, Dr. Charles H. Glidden, Little Falls, N. Y.

The newly elected President, Dr. Wheelock Rider, then took the chair.

Dr. Wm. A. Howe moved that a committee of this Association be appointed to memorialize Congress upon the subject of a more equitable law for the compensation of Pension Examining Surgeons. This motion was seconded, whereupon a discussion arose as to the wisdom and propriety of such action at the present time. Upon being put to vote Dr. Howe's motion was lost. The discussion of this matter was then continued in a somewhat informal manner. Dr. H. H. Whitcomb moved that the President appoint a committee to consult with the officers of the Pension Bureau and ascertain their views on the subject of the compensation of surgeons and report at the next meeting of the Association. Carried.

The Association then adjourned.

SECRETARY'S REPORT.

Your Secretary respectfully reports that the publication of our Transactions recounting the proceedings at our Convention held last July in Chicago was greatly delayed by the printers' strike which was inaugurated last summer and is not yet ended. You have all perceived that the volume when issued was somewhat thin as compared with its predecessors which fact is explained by the paucity of the material available for incorporation within its covers.

In the latter part of the Summer I prepared a circular inviting all Pension Examining Surgeons, whether members of Boards or expert Examiners to join our Association. This

circular was sent to every Examiner whose name appears in the official roster of the Pension Bureau. There are nearly five thousand of these Examiners. Enclosed with each circular was a copy of the letter written in the preceding year by Medical Referee Houston to our former Secretary, Dr. Wheelock Rider, and also a printed blank application for membership. The members of the Association will recall the fact that in the so-called Convention Circular an invitation was extended to all Pension Examining Surgeons, whether members of our Association or not, to attend this Convention. This circular was sent to all Examiners in the New England States, in Eastern New York, in New Jersey and to some in Pennsylvania, the hope being that many not yet members would be influenced by the short distance to be traveled, and by the favorable railroad rates to meet with us and eventually to join our ranks. The result of this repeated invitation by circular has been that we have received up to the time of the writing of this report seventy-eight applications for membership, each accompanied by the fee of two dollars for yearly dues. This response is to a certain degree encouraging, but in this connection the statement must be made that of the six hundred and thirty-two active members whose names appear in Volume III of our Transactions, three hundred and seventy-eight have paid their dues for 1905 and 1906, while two hundred and twenty-eight have failed to do so. Twenty members have resigned during the year just ended, and we have learned of the death of one honorary and eleven active members.

Dr. Jacob F. Raub died suddenly in Washington, D. C. on May 21st last. He was formerly Medical Referee and was an honorary member of this Association.

The active members whom we have lost by death are:

Dr. F. H. Benedict, Weedsport, N. Y.
Dr. John W. Cooper, Elkton, Md.
Dr. Lowell Holbrook, Thompson, Conn.
Dr. J. A. Jobes, Greenville, O.
Dr. Thomas Ross, Sacramento, Cal.
Dr. R. V. Spackman, Dubois, Pa.
Dr. M. C. Wedgewood, Lewiston, Me.

Dr. Horatio Woodbury, South Paris, Me.

Dr. Horace Wardner, La Porte, Ind.

Dr. E. M. Whitson, Jonesboro, Ind.

Dr. Albert Wilson, Sidney, O.

In conformity with an amendment to Article X of the Constitution, which was adopted at our last Convention, our Treasurer has furnished a bond for one thousand dollars executed by The Pioneer Insurance Company, of New York, which bond has been approved by the President of our Association and is now in the custody of the Secretary. It runs for one year and expires November 16, 1906.

Respectfully submitted,

PORTER FARLEY,

Secretary.

TREASURER'S REPORT.

Treasurer's Office, Little Falls, N. Y.
June 4, 1906.

Gentlemen of the Association:

I take great pleasure in submitting this, my fourth annual report of the financial condition of THE NATIONAL ASSOCIATION OF UNITED STATES PENSION EXAMINING SURGEONS.

Amount on hand at date of last report, July 7, 1905	$290 57

RECEIPTS FOR THE CURRENT YEAR.

From 3 members, dues for 1903-4	6 00
From 22 members, dues for 1904-5	44 00
From 321 members, dues for 1905-6	642 00
From 87 applicants	174 00
From sale of Transactions, eleven copies	11 00
From 5 members, dues for 1906-7	10 00
Total	$1,177 57

DISBURSEMENTS FOR THE CURRENT YEAR.

Itemized account of former Secretary Wheelock Rider, Expenses at the Chicago meeting, Postage, Express charges, Clerical work, etc	$ 41 47
Itemized account of the Secretary for the year, including postage, distribution of Vol. III, circular letters, programs, stationery and a small amount for clerical work	109 90
Burnett Printing Co., printing and binding Transactions, Vol. III	261 85
Burnett Printing Co., circular letters and other printing	57 80
Itemized account of the Treasurer, covering postage, printing, account books, Treasurer's bond, clerical work	61 31
Secretary's salary	200 00
Treasurer's salary	100 00
Total	832 33
Balance now on hand	345 24

Respectfully submitted,
CHARLES H. GLIDDEN,
Treasurer.

REPORT OF AUDITING COMMITTEE.

National Association of United States Pension Examining Surgeons.

Gentlemen:

Your Auditing Committee would respectfully report that they have examined the account of the Treasurer, with the vouchers in his possession, and find that the same are correct. The balance in the hands of the Treasurer is Three hundred and forty-five twenty-four hundredths dollars.

Respectfully submitted,

THOS. FRANKLIN SMITH,
L. J. GIBBS,
Auditing Committee.

Report of Committee on Necrology

Mr. President and Members of the Association:

Your Committee appointed yesterday on Necrology, beg leave to submit the following report:

In doing so, we feel obliged to admit our inability to do more than present a set of general resolutions on the death of the several members who have died during the past year. This list includes several men of state and national reputation, the most eminent of whom is Ex-Medical Referee Jacob F. Raub.

No one man in our Association has been more deeply interested in its success from its inception, than has Dr. Raub. He was present, as many of you know, at the first meeting of the Association at Saratoga Springs, N. Y., and did everything in his power to contribute to its success. Even before that his hearty approval of the suggestion to effect such an organization made possible its realization. At each annual meeting, except at Chicago, he has been with us, lending by his congenial presence, and wise foresight, his unqualified approval of our efforts to strengthen the organization, and to improve the medical examining service among the Pension Boards in the United States.

In his death we have lost not only a devoted friend, but a valuable co-worker, and to us it would seem fitting that this Association should pay its highest tribute of respect to his memory. Your committee would suggest that a more extended notice be prepared of his death, and that the same be printed in the Transactions of the Association.

It is quite probable that the list of deceased members, as read yesterday, does not include all of our losses during the past year. Your committee would esteem it a favor to have any member present supplement this list, in order that it may be made as complete as possible.

While not wishing to appear to solicit the work, your committee will hold itself in readiness to perform such further duties

on necrology, as the wisdom of this Association may see fit to direct.

Our report is hereby offered:

Inasmuch as it has pleased our Heavenly Father, in His infinite wisdom, to summon from our midst, Drs. F. L. Benedict, John W. Cooper, J. A. Jobes, Lowell Holbrook, Jacob F. Raub, Thomas Ross, R. V. Spackman, Horace Wardner, M. C. Wedgewood, E. M. Whitson, Albert Wilson, and Horatio Woodbury, honored members of our Association, and

Whereas, in their death our Association, while bowing to the will of Divine Providence, keenly appreciate and deplore their loss, be it therefore

Resolved, that the National Association of United States Pension Examining Surgeons, in convention assembled, hereby extend to the bereaved families of our late members, this our token of sympathy in their time of sorrow, and be it further

Resolved, that a copy of these resolutions be presented to the family of each departed member, and where possible, published in the local papers of their late homes.

Resolved, that these resolutions be made a part of our permanent records, and the same be printed in the official organ of our Association.

(Signed) Wm. A. Howe,
H. H. Whitcomb,
Committee.

Boston, Mass., June 5, 1906.

Letter from San Francisco

BY

DR. CHARLES V. CROSS

SAN FRANCISCO, CAL.

DR. Charles V. Cross has been the most active member of this Association on the Pacific Coast. He has manifested his interest in our organization by strenuous personal efforts to increase our membership in his State and is now a member of our Executive Committee. Immediately after the earthquake and subsequent fire which devastated San Francisco your President received a brief letter from Dr. Cross explaining that under the desperate straits to which he and his fellow citizens were reduced it would be impossible for him to be present at our convention in Boston. This letter President Fox forwarded to your Secretary who at once wrote a letter of sympathy to Dr. Cross and in it asked him, if possible for him to do so, to write a letter to the Association giving some account of his experiences since the great calamity in his city. In response Dr. Cross caused the following letter to be mailed to the Secretary. It is a private letter which he wrote to his brother living in Texas but it is of such general interest that it was very properly published in the Dallas Morning News of Tuesday, May 1, 1906.

The letter follows:

First Free Emergency Dispensary,
2007 Devisadero St., San Francisco, Cal.

April 23, 1906.

My Dear Brother:

Just while I have a minute, instead of eating breakfast I will try and send you a few lines to tell you we still live. Ere this I suppose you received my first letter, that was written while the fire still raged. After writing that letter we were in danger again of being burned out and the real danger did not pass until last night, when a rain came up, and we are now practically safe.

As I said, the fire would stop when it consumed all, and so it did. The little district we are now in is all that remains of this city, and most of it is uninhabitable. Many houses are shaken down or are too dangerous to go into.

To begin with, I will relate some of my experiences from the quake:

At the first shock it knocked over furniture, plaster fell, and in Miss Danks' room the chandelier fell off, allowing the escape of gas. At her screams I ran in and on my way stopped to put out a fire that had been started by matches that had fallen with other material and lighted. Soon as I saw the gas escaping I ran to the meter, and as luck would have it I was able to turn it off with my fingers.

The damage to the house was not apparently serious, so far as a place for habitation, and after we had righted some of the wreck and eliminated the danger of fire we joined the multitude in the streets, for by this time there were thousands in the middle of the street.

As no buildings in our immediate vicinity were crushed the people seemed good-natured, but the quakes that continued at intervals sent terror to their souls. Everybody joked and laughed and altogether up to that time it looked well, but the picture was soon to change.

On a bike I went down to my office and the picture of desolation increased with every block. Fires on the way had started and desolation was on the way.

The Columbian Building, on the fifth floor of which my office is located, did not have a piece of plaster on it the size of my hand. The front wall was leaning toward the street two feet and the steps in places were loose. The elevators were helpless. I waded through the plaster and debris and found my office like the rest.

After loading up with what I considered the most valuable articles I started out. On the way down a piece of marble struck me in the back, and with my bundles and typewriter I rolled down about twenty steps, and the typewriter suffered the least of all. For a while I could not move, but the raging fire which was

in the block across the street from me soon brought me to my feet. I staggered to the rear door, which was the only one that could be opened, and stood contemplating what to do, when a strong, husky lad walked by with the multitude that was filing past. I grabbed him and asked him if he wanted to work. He said, "Yes," and with him we moved up a half mile and returned for another load. The fire at this time was across the street and the beautiful Emporium, Academy of Sciences and Flood Buildings were in flames. Martial law was declared and people were driven back. My Government appointment enabled me to get past with my boy and we got another load. I could not carry a thing, but he was a regular pack-horse. We got this load safe, and as the fire had escaped us, and as the buildings on the other side were gone, we took hope. I started home and met one of my patients with an auto. With him I returned and got my diploma, some Government books and packages we could not get out on my first trip, and these we took to Miss Danks' house, at 2007 Devisadero Street.

Fire had left our district and we hoped it would not return. There was no water to fight it with and it was raging in several places, making great headway, but it was far from us and we felt reasonably safe. It had broken out where we had first carried our loads and we moved them a little further on to what we considered a safe place. Later on this was menaced, and again we moved, this time to the beach in the auto, which I was able to get again. It is well we did, for by this time it was dark and everybody was exhausted, though sleep for many of us was impossible. I reached home at 8 p. m. and went right to bed, for I felt the fire could not reach us before morning, and besides I could no longer stand up. I slept like a good dog and was the only one in the block that did sleep. I can't write more today. I have treated fully a hundred people while writing this letter and the number is increasing, as it is now raining.

April 24—To continue my story, if I can pick it up after the multitudinous events that have transpired since mailing you part of the account of my experiences and the numerous duties that have made this week go by as one day.

Well, as I remarked, I went to bed, for I had but two hours sleep the night before the quake and I was exhausted. I slept well awaking occasionally by the explosion of dynamite that was used in the endeavor to check the flames. In these intervals I could plainly hear the roar of the flames and that dreadful and unmistakable sound of a great conflagration, but I slumbered on until daylight, knowing that I would need all the strength I could store for the morrow. If the disaster had ceased there, there was enough work, and if it continued there would be more. It continued, and seemed as if it would never end.

Miss Dank's house, 2007 Devisadero Street, had been made a temporary emergency hospital the day before, but there was little to work with. Supplies must be had, and for them I started to get authority to purchase. I spent half a day trying to locate the Mayor's headquarters and when I found it I thought my chances to see him were hopeless. Fortunately the policeman on guard was a patient of mine and when he caught sight of me behind a hundred struggling men he was keeping back he raised his finger in reply to the one I had up to catch his eye and shouted to me, "Come in." This was my chance. The crowd turned to see who the great personage was that could get such recognition, and as they turned to look I remembered the saying, "People stand back for a man who knows where he is going," and I started in. They parted for me as if by instinct, and of that mass who had passed three barriers already, only my companion and myself were permitted to enter. I soon learned the reason. The little room was filled with prominent men. They, too, turned to see who the new intruders were, and I marched direct to the Mayor, who was in his shirt sleeves sweating from the violent work he had done. His headquarters had been moved three times that day. I told him what I had done and what I wanted, and he dictated to his stenographer an order, a part of which reads: "And he is invested with the same authority that I possess." I wasted no time leaving that room and getting things organized.

Now everything works like a clock and I have a staff of over fifty persons aiding in this good work. They are all good hustlers. No special credit is taken by any one. It is given to

the entire force, and includes physicians, nurses, messengers, assistants, cooks, firemen, baby clothes factory with a dozen young and elderly women making clothes for the youngsters who are born in the parks, squares and improvised maternity homes spread about the city, or what is left of it.

I have not had time to dwell on my misfortune, and it is just as well. For the first few days I used a bike to lean on instead of crutches, and am getting on in good shape. I have a good bed to rest in about three hours a night since the two night's rest five days ago, and the authorities are good enough to honor any order I send out.

I have been singularly fortunate in getting two wagons in my service, donated by friends. With these we have established communications with the vegetable gardens, dairies and the adjoining country of San Mateo, where we secure what we need and much to dispense to the families of our assistants.

On our staff is Harry Butman, a commercial traveler, who is engaged in placing those who are lost and wandering into the dispensary. Harry is a noble worker and all traveling men can feel proud of the work he is doing.

Another is Kelley; he is chief distributor of baby clothes and is kept busy looking after the new arrivals and visiting the maternity homes and camps.

Both of these boys were burned out. They spent three nights in the open and are now on cots in a room with me.

All cooking is in the street. We have a stove that was resurrected and was a god-send. The Chinaman cook is a prince and we cook for more than a hundred a day on that stove. Everybody is cheerful and the health in our district is good, considering the disaster.

All "grog" is shut off without a prescription. We have some for medical uses, and Miss Danks is chief custodian of it. Yesterday Kelley came in wet and wanted a drink. The old lady was working near by and I wrote her this note, "Miss Danks: The bearer is suffering with wet feet and desires something to warm and dry them from within. Please give him a good potion of 'grog' and oblige.—Dr. C." There was a lull in the rush that

had been going on all day and in a grave and dignified manner she started to get the potion. As she started she turned a look of deep sympathy upon the sufferer, which soon changed when she saw who it was, and needed some coaxing to get it. Everybody laughed to see the change of expression and the pathetic look of Kelley.

We are all in good condition, considering. Last night we had another very heavy shake, and it scared many people.

The reports you read can not give you any idea of the terrible extent of this disaster. It cannot be exaggerated and must be seen to be appreciated. You can get more information from the papers than I can give you, as I have not been three blocks from the dispensary for three days. Tomorrow I will try and see where my safe fell and the prospects of getting it. There is but little in it but a few diamonds that were left with me for safety.

Affectionately your brother,
CHARLES V. CROSS.

Recent Advances in our Knowledge of the Heart

BY

FRANCIS W. PALFREY, M. D.

BOSTON, MASS.

IT has often been said that a man is as old as his arteries. It might be said with no less truth that a man's life is the life of his heart. For in almost all cases, whatever the disease, cessation of the heart-beat is the ultimate cause and sign of death. Tuberculosis may attack the lungs, or cancer the stomach; yet in either case we pronounce the patient dead only after feeling in vain for the pulse and placing the stethoscope upon the heart. Thus an understanding of the heart's action is fundamental in all medicine.

Failure of the heart, however, need not mean heart disease. The heart may be weakened simply as a part of the general weakening of the muscular system in any acute or chronic disease. It may fail from excessive demands upon it for increased action, as in kidney disease or pneumonia. In these no true heart disease need exist. But to-day we are to consider only those conditions when the heart itself is primarily diseased in an otherwise healthy body.

True heart disease is either valvular or myocardial. In the former the valves fail to perform their duties. In the latter the muscle walls, the contractile or motor functions are at fault. The heart is like a Davidson bulb-syringe whose valves may become obstructed or leak, and whose walls may lose their elasticity, loss of efficiency resulting.

Now valvular disease when once established acts in a purely mechanical way and creates purely mechanical defects in the valves of the heart-syringe. Obstructions or stenoses, regurgitations, insufficiencies or leaks, are as well understood in the heart as in the syringe. Except for their etiology, little remains to be explained. Thus valvular disease can be omitted from the present discussion.

Myocardial diseases, therefore, are our main concern today. The disturbances of function of the cardiac muscles are still very imperfectly understood. They are, therefore, the subject of most recent investigation and inquiry. As age advances and arteries thicken, various disorders of the heart-action become frequent. Slight exertion causes dyspnœa and palpitation. Greater exertions may cause sudden death. Irregular rhythm becomes common, either with or without symptoms of cardiac insufficiency. Stokes-Adams disease, angina pectoris and other abnormal conditions occur.

At autopsy in these cases the pathologist is often unable to find adequate explanation for the clinical symptoms. Unlike the valvular diseases, these disorders often do not present obvious lesions. In some there are myocardial degenerations, yet in others these are not found. For this reason they have been set down as "neuroses" or functional diseases without organic basis, or a cardiomotor centre in the medulla or the nerve fibres in the heart have been supposed to be at fault. Yet when a patient has for years had a weak, rapid and irregular heart, with dyspnoea, cough and cyanosis, with œdema and ascites, it is hard to accept the pathologists' report of autopsy that there is nothing abnormal in the heart. Such cases bring us to realize that human knowledge is deficient, and that there must be principles of physiology underlying the heart's action of which we are still ignorant.

Let us, therefore, turn to the physiological laboratories in hope of finding in the more recent views held there some hint at the solution of the difficulty. Physiology is the branch of science upon which medicine most heavily rests, yet which we clinicians too often neglect.

Turning to the progress of physiology in the past ten or fifteen years, we come at once upon a mass of research work which has led up to important revisions of our theories of the heart's action, as I shall endeavor to describe.

For the purposes of this paper the advances along two main lines of investigation are of greatest interest. The first of these subjects of study concerns the nature and origin of the stimulus which produces the heart-beat. The heart, we were formerly

taught, is a muscular organ, free from voluntary control, it is true, yet dependent for its motor stimuli upon *nerves,*—the vagus, the accelerator fibres of the sympathetic and the special ganglion system of the heart itself. In other words the heart was under full control of the nervous system and required nervous impulses for every beat. This has been termed the neurogenic theory of the heart's action.

Physiology, however, advanced. New observations were made which were hard to reconcile with this conception. Thus, in opposition, sprang the *myogenic* theory, that rhythmic contraction is an inherent property of cardiac muscle, which goes on from early embryonic life until death, somewhat influenced by, but not dependent upon any nerve action. This theory has steadily gained ground and is now very generally accepted.

The facts upon which it is based may be stated briefly as follows:

In the embryo the rhythmic contractions of the heart begin long before any nerve fibres are developed.

After section of all nerves leading to the heart the heart will still continue its regular beating.

After paralysis of all motor nerve endings by curare the rhythmic action continues undisturbed.

Strips of the heart muscle of cold-blooded animals can be made to continue their rhythmic contractions even though entirely removed from the animal body.

When the normal beating has been stopped by ligatures at the base of the heart, contraction waves can be made to progress in the reverse of the normal direction. Also when the heart muscle has been cut into zig-zag bands so that it is unlikely that any nerve fibres remain undivided, the contraction wave will advance progressively throughout these bands. The argument that the arrangement of the cardiac muscle fibres is not consistent with the myogenic theory is removed by the discovery of the auriculo-ventricular band of muscle fibres.

Before this evidence objections have melted away, so that it is now well established that the heart is not dependent upon nerve impulses to excite its contractions. It therefore contains within

itself the power of automatic rhythmic action, the stimulus arising in the muscle itself.

Now as to a second point, the path along which the stimuli are transmitted. Observations upon living animals make plain that the contractions of all muscle fibres of the heart are not simultaneous but that the contraction occurs first at the entrance of the great veins into the auricles, spreading from there like an advancing wave, progressively downward over the auricles, over the ventricles, to the apex. This wave is somewhat retarded as it passes the division between auricle and ventricle, causing an easily perceptible difference in time between the contractions of auricle and of ventricle. But this check to the wave's advance is but momentary and does not obscure its progressive course.

The cause for this slight obstruction to the wave of contraction is explained by the arrangement of the muscle fibres. At the ring-like division between the auricle and ventricle, the heart is composed almost entirely of fibrous tissue. The separation of auricular fibres from those of the ventricle by this fibrous tissue is almost complete, a fact which was formerly used as an argument that the stimulus to contraction must be through nerves and not through muscle fibres. This argument has been overthrown, however, by the discovery of the obscure but important auriculo-ventricular band or muscle bundle of His. This small band of muscle fibres leading from auricle to ventricle now seems beyond question to be the route along which the contraction stimulus passes from auricle to ventricle. Thus the fibrous ring impedes but does not prevent the passage of the contraction wave. This has been proved experimentally by the fact that if this bundle is tied off, the rhythmic beats of the auricle cease to be transmitted to the ventricle. The ventricle still beats, it is true, but only slowly and without relation to auricular contraction.

In passing it may be of interest to note the effect of this pause in the wave's progress. By causing the ventricular contraction to lag behind the auricular beat, the auricle is given time to force its blood into a relaxed ventricle before the ventricular systole begins.

It being established that the heart's contraction is due to

the successive contraction of each individual muscle fibre from base to apex and that this contraction is automatic, so to speak, an intrinsic power of the cardiac muscle independent of nerves or other outside stimuli, the functional powers of the cardiac muscle are analyzed by Engleman under the heads of four qualities. Each fibre must have excitability, contractility, stimulus production and conductivity. In other words, first, each fibre must be susceptible to the impulses received from other fibres; second, it must have power to contract; third, it must have power to produce stimuli to excite the next fibres in the sequence; fourth, it must have power to transmit these stimuli when produced. All of these four properties, according to Engleman, may vary independently of each other. Loss of any one of these functions will cause disturbances in action of the heart as a whole.

Thus, to sum up, we have an automatic regularly beating muscular syringe, dependent in its action upon the rhythmic successive contractions of individual muscle fibres. The contractions start in the walls of the great veins and spread in waves over the auricles. At the auriculo-ventricular band the wave is almost broken but enough passes through the bundle of His to cause, after slight delay, a continuation of the wave down to the apex. The auriculo-ventricular band is therefore a point in the wave's course where the wave passes through a small opening and where any increase in resistance will have the greatest effect.

Now let us turn to clinical applications of this physiological doctrine. There is reason to hope that through it we are on the eve of great advances. Already one important disorder, long recognized but hitherto a mystery, has been fully explained.

This disease is the Stokes-Adams syndrome, essential bradycardia or slow pulse. It was first described by Adams early in the last century, and further by Stokes twenty years later, but the cause remained an entire mystery. It is not a common disease, yet many of you will probably recall cases. It is characterized by permanent slow pulse with syncopal attacks. It usually occurs in advanced age and in association with arteriosclerosis.

To refresh your memories of the disease I will briefly describe a very typical case which I attended last summer.

Mr. E. C. W., 70 years of age, married, a traveling salesman, was first seen on September 2nd, 1905. Throughout his life he had always called himself a well man. His personal habits were good; no venereal history was obtained or suspected. The only previous illness was an attack called bronchitis, or asthma, perhaps chronic influenza, five years before. One year ago, he told me, while sitting quietly in a chair, he had become suddenly unconscious, but after a minute or two consciousness returned and he was able to walk to bed. When his pulse was felt after this it was found to be very slow—about thirty per minute—but he complained of no symptoms but weakness. This attack was not repeated. After a week at home, the patient resumed his usual occupations. Soon he was traveling from city to city as freely as ever. His pulse, however, remained slow—probably about 40 or 50 per minute.

One year after this first attack, eight days before I was first called, he began to have slight attacks of faintness. These would force him to lean against a building for a moment when they came upon him in the street but never caused him to fall. On account of these he gave up going about. In the next few days attacks of greater severity began to occur, on an average of once a day. In these there would be momentary but complete loss of consciousness, sometimes with slight convulsive movements. It was after one of these that I was called. Except for such attacks symptoms were almost absent. He had no pain or palpitation; no dyspnœa or cough. He had some distress after eating, and his bowels were constipated but he had not paid much attention to these symptoms.

On examination he seemed to be a strong man, well-preserved for his age, and well nourished. His color was pale but not cyanotic. The one striking fact to be noticed was that the heart was beating only 24 times a minute. The heart was of normal size. The sounds were strong and fairly regular. The first sound was long drawn out and forcible, suggesting a powerful heaving contraction. The second sounds were sharp and

clear, the pulmonic being slightly accentuated. The systole was somewhat long, but the striking thing on auscultation was the length of the diastolic pause. After each second sound the heart seemed to rest inert without tendency to contract again for a period 3 or 4 times the length of the systole. The pulse was of large volume and good tension with each beat, but the beats were so infrequent that the diastolic pressure was probably low.

On close inspection pulsation could be made out above both clavicles at the rate of 80 per minute.

Once while I was listening to the heart an unusually long pause between beats occurred, and the patient was noticed to put his hand to his head. Afterward, without questioning from me, he said that at that moment he had had a slight faint spell and that that was how they always came on.

The case was seen in consultation by Dr. W. W. Gannett, who confirmed my findings and the diagnosis of Stokes-Adams disease.

About two weeks after I was called a change for the worse occurred. Beginning with a severe attack of unconsciousness, general weakness rapidly increased. Marked Cheyne-Stokes breathing developed with periods of violent dyspnœa separated by periods when breathing was absent. Finally during one of these paroxysms of air hunger he died. Unfortunately no autopsy was allowed. I also regretted that preparations which I had started to obtain tracings from his arteries, heart and neck, were not completed in time.

Cases of this type have been attracting special attention ever since the myogenic theory came into prominence. Within the past year an exceptionally careful study of one case of syphilitic nature was made by Erlanger, of Baltimore, by means of tracings. These tracings showed the auricles and ventricles to pulsate independently of each other, the former rapidly, the latter slowly, but without definite relation between the two. As improvement occurred under iodides a definite relation became established, the auricle beating sometimes three times and sometimes four to the ventricle's once. Finally the normal equality in rate was restored.

Experimentally on animals an identical condition was produced by clamping the bundle of His—partial compression giving the partial heart-block, the beats of the auricle being a multiple of those of the ventricle, and greater compression destroying all relation between the beats of the two chambers.

In December, 1905, Stengel, of Philadelphia, reported the first case of Stokes-Adams disease in which the heart was studied post-mortem with special attention to the muscle bundle of His. He found a small but distinct focus of fibrous degeneration obliterating this bundle, in a heart otherwise normal.

Since then other cases have been proved to show similar lesions, confirming from the standpoint of the pathologist the predictions of the experimental physiologist.

This work in Stokes-Adams disease is very complete and satisfactory. We might wish that this great advance had explained a disease of less rarity. Yet we may well hope that other discoveries are to follow. Here we reach the forefront of our present knowledge. Yet it does not require too great optimism to believe that the way is open for further advances in the near future.

The pathology of Stokes-Adams disease shows how important may be the results of slight lesions easily passed over in a routine autopsy. Other effects of degeneration in this same position demand further attention. The condition of partial heart-block where the auricles beat twice or three or four times to each contraction of the ventricles is being studied. I have seen a case of this when except for pulsation in the neck at exactly double the rate of the apex beat, the heart examination showed nothing abnormal except occasional extra systole and slight weakness of sounds. Remembering the fact that in animals slight compression of the bundle of His will give an exactly similar relation it is probable that in such cases this muscle band contains lesions. Consider again the cases in which from irregular weak sounds and symptoms of broken compensation we have made the diagnosis of myocarditis, but after death the pathologist has found nothing abnormal in the heart. In these cases is it not possible

that lesions existed in obscure but important positions in the cardiac muscle? Such possibilities are as yet without proof, yet the trend of physiology makes such theories plausible.

Now what practical consequences follow from this line of thought? We have seen that the influence of nerve action in the beating of the heart is considered less important than we were formerly taught. The stimulus as well as the power for rhythmic pulsation lies more largely in the muscles than was formerly supposed. Thus in tracing the etiology in any given case we have to look more for the causes of muscular than of nervous degeneration. Mental fatigue and emotion, tea, coffee, and tobacco, the various causes of nervous exhaustion and degeneration are less to be thought of than those of muscular deterioration—acute fibrile diseases in the past history, poor conditions of life, syphilis, hard work and arteriosclerosis.

BOSTON MEDICAL LIBRARY. MAY 3 1907

In symptomology we have nothing new to mention.

In physical examination advance has been made mainly by means of graphic tracings from the apex beat, the jugular vein, and the peripheral arteries, enabling us to identify the pulsations of the different chambers of the heart. New attention is directed to the meaning of visible pulsations in the neck which do not correspond in rate with the apex beat or respiration. Laborious attempts at classification and analysis of the different types of arhythmia have been made, especially by Wenkebach.

In diagnosis more stress is to be laid on the heart itself as the seat of disorder and less suspicion is to be directed toward the cardiac nerves and the medulla.

Prognoses remain much the same as under former theories.

Treatment is not advanced as yet by these views. Except that we now know why it is useless to paralyze the vagus nerve with atropine, therapeutics have not been benefited. Prophylaxis even is hardly possible.

Thus I have tried to give a brief outline of the more recent lines of investigation of the heart and its diseases. The subject is an intricate one, and my treatment of it may have been too brief even for clearness. Consideration of it, however, is discour-

aging in that it brings us to realize how much lies far beyond our comprehension. I feel hopeful, however, that these slight advances that have been made have prepared the way for more important ones in the near future.

Supernumerary Patellae

BY

S. C. COX, M. D., WASHINGTON, D. C.

THE subject I have selected for a paper to read at this meeting can be of little interest to the practitioner on account of its rarity, but there is no doubt that any anomalous anatomical condition should be of practical importance to the members of the Pension Examining Boards for the reason that they, contrary to the usual facilities enjoyed by practitioners for obtaining necessary data upon which to base diagnosis, are frequently handicapped by unreliable statements of claimants not conducive to intelligent opinions, which often prevent differentiation between normal and abnormal conditions.

The case I have to report will emphasize this point, and will, if it does nothing more, call attention to the importance of making it a matter of routine to thoroughly examine not only every alleged disability but corresponding normal structures as well for the purpose of comparison. If this paper will accomplish that, it will have served its purpose from a practical point of view.

Anatomists tell us that the patella is a sesamoid bone developed from a deposit of cartilage cells in the quadriceps extensor tendon; that it is cartilaginous until about the third year, sometimes as late as the seventh. Ossification begins usually by one, sometimes two, centers, and is completed about the age of puberty.

In an examination of the literature of the subject of anomalies in the patella in the library of the Surgeon General of the Army, while there are numerous reported cases of congenital absence, malformation, and malpositions, there is but one case of supernumerary bones. William Wright, of Birmingham, in the Journal of Anatomy and Physiology, reports the case, in which a subject in the dissecting-room of Birmingham University was discovered to have had three bones on one side, but in this case two of the bones were osseously united and the third so nearly

united to the other that it was impossible to ascertain its segmented character except by an inspection of the posterior surface of the bone or bones, the anterior aspect being joined by the quadriceps extensor tendon.

In the case that I shall report, I must confess that, owing to the absence of a reliable history, due to ignorance or lack of frankness (for mercenary motives, no doubt), or both, on the part of the subject, it would be absolutely impossible to say positively that there are duplicate bones, so that I can only offer you the evidence pro and con and invite your discussion.

The subject was a soldier who enlisted in a Maryland Volunteer Regiment for the war with Spain. The records of the muster-in examination disclose nothing that would indicate any abnormality of either knee-joint at the time of the soldier's enlistment. A few weeks after enlistment, while engaged in drill practice with his company, he sustained a fall, injuring his left knee, which injury the hospital records show was only nominal, and treatment by rest in company quarters for a day of two was administered. A few weeks subsequent he was discharged by reason of disability, whereupon he immediately applied for a pension; was referred for examination to a Board whose report to the Pension Bureau was as follows:

> There is a partial dislocation of left patella, impairing the motion of flexion of left leg and causing a limp upon walking. There is a scar 3 inches in length over upper portion of patella, with slight contractions and loss of tissue. There is no injury of right knee.

He was afterwards referred to another Board, which sent in the following certificate:

> He has a transverse fracture of left patella. The fragments are completely separated two inches, with no union, ligamentous or otherwise, between them. He is lame in the leg, which he drags in walking. He is unable to ascend steps without some support. He keeps the leg bandaged tightly to enable him to walk. Uses cane to aid in locomotion. He claims the leg was injured when he was a boy, for which he was operated on

at a hospital. Has a transverse scar extending across from side to side of knee joint, which was evidently made by a surgeon for the purpose of wiring the fragments together. This was probably the operation he alludes to, as occurring in boyhood, as he does not report any operation while in the Military Hospital at Fortress Monroe, after the injury received while on drill. We think it probable that the surgeon wired the fragments of the patella together successfully in the early operation, but that the exertion, while on the aforesaid drill, separated them and caused a renewal of the fracture and the present condition.

On October 5th last, he appeared for a test examination before the Board of which I am a member, and we found the following conditions present and so reported them, viz:

There is a transverse linear scar 4 inches long across front of left knee, well healed, not sensitive, adherent or dragging, seat of previous operation. No swelling about joint, nor evidence of recent inflammation. The patella is divided transversly, the upper and lower fragments being separated two inches and the two halves connected by two bands, separated by a vertical depression, the outer band being longer than the inner. The other structures of the knee-joint, as well as those above and below, are apparently normal.

The right patella, however, is in the same condition, the fragments being separated 1¼ inches and the band between the fragments being single. Flexion and extension of both knees is unimpaired the only difference being shown in the gait, the left foot being brought forward with a fling, but does not walk on fore part of foot and is able to put heel to ground. Does not require artificial aid in walking.

In the opinion of the Board, the condition of both patellae is congenital and results from lack of union of the epiphyses, the alleged injury in 1898 having increased the separation of the fragments by a stretching

of the ligamentous bands of the left knee connecting the fragments.

The opinion of the Board as to the condition being congenital was accepted by the Pension Bureau and he received a rating under ruling 131, the effects of former injury to same knee and congenital defects being excluded.

The history of this case, previous to enlistment, as shown by the testimony of his parents and other members of the family, is that in childhood the claimant sustained an injury of the left leg, but there was nothing in the testimony to indicate that there had been a fracture of the patella, nor that an operation had been performed. A physician in the claimant's home city certified that he had treated the claimant "in childhood" at his, the claimant's home, by ordinary methods "without operation," for a fracture of the left patella, but as the surgeon's present age, according to his affidavit, is only a year more than that of his former child patient, the claimant, we will be charitable enough to say that he probably confounded this case with some other, as I believe we will all agree that the treatment of a case of fractured patella by so youthful a surgeon without even so much as leaving a limp is beyond our comprehension. This evidence, therefore, is without probative value.

In summing up the case, to use a legal expression, it appears that there is no authentic evidence indicating a fracture of the left patella and none whatever to show, even by the claimant, that there was ever any injury of, or any result of injury to, the right knee, so the tendency of all the evidence is in favor of there being supernumerary bones and that the condition is congenital. Moreover, an examination of the skiagraphs of the knee-joint, submitted for your inspection, would tend to negative the theory of fracture, as none of the bones, seen in the pictures, are of normal shape and size. Those of the right knee are somewhat pyramidal with the apices toward the surface, and if approximated, would not form anything resembling a normal patella; in other words, they would not "fit." Those of the left knee are irregular in shape and if placed together would be much too large in proportion to the size of the joint. The pictures also reveal plainly in

the left knee and faintly in the right, the tendon of the quadriceps extensor, intact, passing from the upper to the lower bone.

If we accept this as a congenital anomaly, what is the exact pathological, or we might say, histological condition, presented?

Although our Board reported that "in our opinion the condition is due to a want of approximation between the epiphyses of the patella," subsequent research and reflection have, at least, changed my mind, for the reason that the bone is developed, generally, from one point of ossification, and when from two, the points lie side by side and not vertically, as in the case under discussion. Moreover, even had the bones developed from two points of ossification lying one above the other, there could hardly have been any separation of the segments in a cartilaginous structure. Wright, in the report of his case, explains, with diffidence, the presence of accessory bones upon the theory or hypothesis of outlying deposits of cartilage-cells in the ilio-tibial band adjacent to the patella, uniting with the central deposit in the tendon of the quadriceps extensor. His theory of two deposits of cartilage cells is probably true, but in our case both deposits were in the tendon of the quadriceps extensor, one lying superior to the other, but so far separated as to prevent becoming united, thus forming two separate bones.

LEFT KNEE.

RIGHT KNEE.

Disease a Process in the Interest of Health

BY

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I OFFER the proposition that disease is a process begun and carried on in the interest of health. Not that in general it is desirable, but that under adverse conditions it is simply a reaction upon whose success physical salvation depends.

The uneducated have no true idea of the nature of disease; witness the facts that they wear charms and amulets, and carry horsechestnuts and potatoes in their pockets to keep it away; that they regard it as an entity, personifying it in their speech in such a manner as to show that their use of words is in no way figurative.

Language, and particularly medical language, is full of terms which originated in mistaken, and for the most part, superstitious notions. The mistakes in which they originated have been discovered, the ideas which they express have been remoulded, but the forms of expression remain, and are so transparently figurative as to be unobjectionable. It is hypercritical to object to such terms as "sunrise" and "sunset" although they originated in profound ignorance of the facts which they express.

Without pretending to say how many speak literally, and how many with a more or less vague appreciation of the figurative nature of their language, let us notice the forms of expression commonly employed in reference to disease. People speak of being seized by it; of being attacked by it; of having it driven into or out of them. The doctor is asked "Can you cure this disease?" Very seldom is the question asked, "Can you cure me?" It is worth while to notice also the derived meaning which as applied to disease has come to be the only current meaning of the verb, to cure. Even physicians are heard to speak of having cured certain diseases, meaning evidently something more than that they have ministered to those afflicted and have cared for

them. All this shows a popular and even a professional tendency in language, if not in thought, to overlook the causes of disease, which are the enemies of health and to objurgate the disease itself, which is really nothing more or less than the beneficent reaction which the organism makes in the face of adverse conditions and always in the interest of health.

The confusion of ideas which prevails on this subject of disease may then be a sufficient apology for the attempt here made to set it in a little clearer light. Not that it will make disease any less painful to the sufferer, any more than a knowledge of the earth's motion will affect the beauty of the sunrise in the eyes of the beholder. But it is something to know the real nature of every phenomenon.

What is disease? If it is not a person or even a thing, what is it? Let us reach an answer by a somewhat indirect method. Negatively stated, Disease is the absence of Health; and this throws us back to seek for a satisfactory definition of Health. Health is the perfection of Life. What then is Life? The adequate definition of Life has taxed many thoughtful minds. The subject is very fully discussed by Herbert Spencer in the first volume of his biology. Definitions by various other writers are there stated and their defects pointed out. He then gives his own proximate definition of Life as "the continuous adjustment of internal relations to external relations." This as stated in his proximate definition. His fuller definition is: "Life is the definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external co-existences and sequences." His shorter and so-called proximate definition is all-sufficient and more convenient for our present purposes. He makes no pretense to solve the problem of life—to answer the questions whence it comes or what power sustains it. He simply indicates that life is a process, and tersely indicates what this process is, viz: "a continuous adjustment of internal relations to external relations."*

An organism to live at all must respond more or less perfectly to its surroundings. If an essential change takes place in them,

*Biology, Vol. 1, P. 80

some change must take place in it; and if the organism is to maintain perfect health its internal adjustments must be in perfect correspondence with external changes. Illustrations of this are perfectly familiar. If the air is filled with flying dust we close or partially close our eyelids. If we dive into water we close our mouths and stop breathing. If we see a heavy body about to fall upon us we dart away from it. These cases are all voluntary vital acts, in correspondence with external changes, or in the words of our formula they are the adjustment of internal relations to external relations. They all tend to the maintenance of life in its perfect condition of health. But all vital acts, whether voluntary or involuntary, are essentially of the same nature. Regarding the organism as a unit they are adaptations of that unit to its surroundings; and regarding the organism as a congeries of many life centers, represented by the cells which form its tissues, the actions of the individual cells are all responses in adaptation to changes in their environment. Looked at in the light of this statement, food in the process of digestion in the stomach or intestines is external to the functioning cells which line those viscera. If a muscle moves it is always in response to some physical change external to itself. Notice of the change is brought to it through the medium of the nerves and the resulting contraction is an internal change in correspondence with an external one. The rhythmic alternation in the color of the blood from bright red to dark crimson, and again from red to crimson every time it completes the round of the general and pulmonary circulation depends upon a change in the individual blood corpuscles in correspondence with the changed conditions in which they from moment to moment find themselves, an adaptation of their inner to their outer relations. Here is a process, which in its uninterrupted continuity, is absolutely necessary to all warm blooded animals. To cease to breath is to begin to die; but every breath is drawn in response to this rhythmic alternation in the quality of the blood.

Now these are all familiar examples of internal changes in correspondence with external ones. They are changes occurring under ordinary conditions and all tending to maintain that

balance of activities which we call Health. A satisfactory definition of Disease is now apparent. If Health is perfect Life, and if Life is the continuous adjustment of internal relations to external relations, Death, the opposite of Life, is the absolute failure of adjustment, and Disease is the attempted but as yet unfulfilled adjustment to adverse conditions of internal to external relations.

It is perhaps too much to claim for these definitions of Life, Health and Disease that they are the only ones which adequately express the facts. There may be others which will stand criticism. But, particularly as regards Disease, no definition which does not in some form embody the idea here set forth, is of any particular explanatory value as suggesting its real nature and the end toward which it works. Webster's definition of Disease is: First; "Lack of ease, uneasiness, distress, trouble." Mere synonyms. Second, "A derangement of any of the vital functions in which their natural action is interrupted or disturbed and causing or threatening pain or weakness." This definition is in some sense explanatory but it contains no suggestion as to the nature of Life and Health, nor of the truth that Disease looked at from our point of view is due to the failure of organisms in the face of changed conditions, instantly to take on functions which are natural as respects kind, but abnormal as respects amount or as to the time in which they must be performed. Among other qualities brevity is very desirable in definition, provided sense is not sacrificed to it. But in respect to brevity, as well as in suggestiveness and sense, how vastly superior to Webster's is the Spencerian definition of Disease, which declares it to be "an imperfect adjustment of inner to outer relations." This tersely intimates that Life and Health are adaptations to changing circumstances, and that Disease, although an active process, is still so long as it endures a failure of sufficient action,—a process which would nearly vanish if the necessary adjustment could be carried out instantly, as for example by the winking of an eyelid under the insult of a flying dust speck; and further that so long as Disease persists, it is a process tending toward and in the interest of renewed health.

Certain voluntary acts, such as closing the eyes to avoid dust, and darting away to avoid a falling object have been cited as examples of adaptation of inner to outer relations; and in these cases the greater or less exertion made necessary to effect the adjustment is the measure of the severity of the process which constitutes the disturbance of ease, that is the disease, involved in the particular effort made necessary by the changed external conditions. It may be an effort as slight as the mere winking of an eye-lid or it may be a desperate struggle to escape impending destruction and which taxes to the limit all the powers of heart, lungs and muscles. The two processes, however much they may differ in severity, are essentially the same in respect to being reactions in the face of changed conditions and are just as truly Disease in its literal sense as are the disturbances observed during an eruptive fever or the knitting of a fractured bone.

Having considered certain voluntary acts as illustrating Disease in its simplest form let us pass to involuntary ones. Suppose that respiration is in some manner interfered with. The irritation in the lungs becomes at once noticeable. In half a minute it is discomfort; in less than two minutes it becomes an agony; in three or four minutes there follows unconsciousness and shortly after this, death. How plainly is the discomfort or Disease in this case due to incomplete adjustment of internal to external conditions; for this Disease or discomfort as it is in such cases called, at any stage up to the time when consciousness is lost, is one which will pass away as soon as the hindrance to respiration is removed; that is to say, the normal internal adjustments will be made as soon as the normal conditions of environment are restored.

In this case of asphyxiation it may seem far fetched to call the discomfort and final agony which follows it a disease, and according to my thesis a process working in favor of health; but what else is it? It is a process which calls into action all the powers of the organism to overcome the changed conditions in which it finds itself. Is not the discomfort,—that is the Disease of the man who is being suffocated by a piece of meat lodged in

his gullet the excitant and a part of the violent process by which he generally happily relieves himself?

True views of the nature of life must be the foundation for true views of the nature of Disease. When once the idea is accepted that the essential fact of life is a correspondence,—that perfect life or health is a continuous and complete adjustment of inner to outer relations there can be room for no other conception of Disease than that it is simply a painful but hope-inspiring effort of the organism to adapt its internal to its external relations.

In the face of unfavorable changes, provided they do not by their suddenness and power, immediately overwhelm the organism, the effort is always made toward effecting an adjustment, and the methods exercised are essentially only exaggerations of habitual and normal ones. Thus, if a dust speck gets into the eye, the irritation which it causes, increases the natural secretion of tears, and so the dust is quickly washed away. The adjustment is effected by no new force or process but simply by increased activity of the normal ones. Many examples might be cited to show that when an organ or an organism is placed in new conditions it at once begins to adapt itself to them, or failing to do so, suffers death or functional impotence.

Seasickness and the nausea following the first use of tobacco are striking examples of those diseases which most evidently are mere failure of adaptation,—incomplete adjustments. But if the land-lubber stays at sea and if the ambitious boy puffs away at his pipe, their organisms in time adapt themselves to the changed conditions, which to the persons concerned then become in a certain sense the normal ones. Now our conception of Disease, as essentially a struggle toward adaptation, is really no truer of these cases than of many others; but its applicability is rather more striking because in these the Disease passes away in spite of the persistence of the cause.

If we consider Disease as the manifestation of a struggle in the interest of health, we may compare it to a defensive battle, fought by a peace-loving people against an invading foe. It is, of course, desirable, if possible, to avoid the pain and horror

of battle, but if an enemy has obtained a foothold on our peaceful shore the battle must be fought and if our comparison of the process of disease to a defensive battle is a valid one, the heroic effort to fight it to a successful finish is a harbinger of peaceful times; for victory brings restored national peace, if the people drive out the invaders. Just so with the healthful organism. Just so with the alien germs which invade it. Just so with the painful struggle, the benignant reaction, the Disease which Nature sets up against the invaders.

All the conservative and constructive workings of Nature are gradual. They advance by steps so slow that progress can be perceived only by comparison of observations made at intervals. Time, therefore, is an essential element for the perfecting of those adjustments to changed conditions which organisms can establish. In the great majority of cases a very considerable time is necessary. We all know how unfavorably sudden changes of temperature affect us and how comparatively pleasant are the transitions from heat to cold, if only they are gradually made.

As very striking illustrations of the very different behavior of organisms under circumstances of sudden, as compared with gradual changes, we may take on the one hand cases of apoplexy and on the other those described as chronic hydrocephalus. In cerebral apoplexy a vessel within the skull breaks and the extravasated blood causes pressure upon the contiguous portion of the brain. The quantity of the escaped blood is generally small as compared with what may be lost with impunity from an external wound; but the man falls unconscious, as if struck with an axe. Chronic hydrocephalus is caused by the slow accumulation of serous fluid within the ventricles of the brain. The quantity of fluid which so collects may be many times greater than that which causes death by pressure in apoplexy, but so gradual has been its accumulation that the organism has been able to adapt itself to its pressure *pari passu* with its increase in bulk. We see these children with their enormous heads living in evident comfort and often with no more mental deficiency than would be expected from the condition of the brain which caused the exudation; that is their symptoms are not those of pressure. The large

doses of opium, arsenic and other poisons to which one may accustom himself are other well known examples of the law that Nature requires time in which to effect her adjustments and given time she can in this respect accomplish wonders.

Perhaps there is no better illustration of the extent to which adjustment may be effected in the organism in the face of changed conditions than that afforded by those cases known in surgery as the establishment of collateral circulation after the ligature or obstruction of an important artery. Briefly stated, this adjustment is effected by the assumption of new duties by a system of small arteries, in that they undertake and often successfully accomplish the nutrition of a limb, after it has become necessary to close by ligature at some more central point the principal artery upon which the limb in question is normally dependent for its nutrition. These smaller arteries do this by taking on an actual growth by which their diameters and consequently their carrying capacities are enormously increased and this, too, not by a mere dilatation, but by an actual increase and strengthening of the tissues which form their walls. As a part of the wonderful process, some of them almost immediately begin, and in case of a favorable result, continue to conduct the vital blood current in a direction exactly the opposite to that in which under normal conditions it was flowing.

Enough, it is hoped, has been said to show that Disease is a process, a reaction provoked by changed external conditions, one that requires time for its fulfillment and one that works always in favor and in the interest of health.

With this conception of Disease, how inconsistent are the popular ideas referred to at the opening of this paper.

When one understands that his pains are due to non-adjustment to changed conditions and at the same time feels assured that Nature is struggling to effect the needed adjustment, his patience may be somewhat fortified and his faith in Nature somewhat strengthened. He no longer personifies Disease; he will be emancipated from the idea, if he has ever entertained it, that he is going to be better in health after an attack of seasickness than he was before the attack was provoked; he feels more faith

in the advice of the conservative physician who regards himself and makes himself understood as the adjuvant of Nature rather than the dispenser of powerful drugs.

There is nothing in all this derogatory to the functions of the intelligent physician. On the contrary the measure of his intelligence and usefulness depends upon the measure of his acceptance of these propositions. Entertaining and believing in them implicitly there is still ample scope for his activities in guiding and modifying the processes of Nature which processes, after all he can do, constitute the sheet anchor of his hope in the management of Disease.

Entertaining these ideas we shall be very circumspect in our use of drugs. Proper food and good air as tending to sustain the normal vital functions and so gain time for reaching new adjustment or re-establishing the old one are in general terms safe and in order. But specific remedies in the sense in which that term is commonly understood are few or perhaps do not exist.

In the light of the doctrine which has here been set forth popular ideas on this subject must be greatly modified. Disease thus interpreted is not an enemy which one has to combat, but it is the sign and token of Nature's conflict with an alien foe. When after a long struggle, death closes the scene we cannot, if we accept this doctrine, say that Discease has conquered, for just the opposite is true; Disease has failed,—that is to say, in the face of changed and baneful conditions the reaction which constitutes disease, has been insufficient, has not been prompt enough, or has not held out long enough. This unrest, this rapid pulse and hurried breathing which we call Disease, are the visible signs of the reaction set up by Nature in the face of adverse conditions and if this reaction can be long enough maintained Nature will effect a readjustment, the patient will recover and we may then properly say that Disease has conquered. Why not so? Is not Disease a reaction, tending toward a readjustment of the organism to its changed conditions? If the answer is "yes," then shall we wish that reaction success in its endeavor, which means

recovery for the patient, or shall we hope for its failure, which means death?

No claim is here made that unassisted Nature working in the organism can overcome all adverse changes in its conditions. The only claim is this: that changed conditions either end life almost instantly, or there is at once set up a reaction, which we call Disease, and that such reaction is beneficent,— that in it lies the only hope for the survival of the special organ affected or of the organism as a whole if the organ or part affected be a vital one. What we may call the by-products of this reaction may be hurtful, and their presence may remain a permanent blemish and a reminder of the insult to which the reaction which caused them was the response. These by-products, such as the adhesions which follow iritis, the cicatrix which is left by a healed wound or the callus which obstructs free movement after fracture in a joint, may be regarded as the scars of battle in the war which has been waged between the forces of Nature within the organism and the forces of Nature outside of it. It is one of the functions of the physician to deal with these by-products as best he can and mitigate, so far as possible, their hurtful effects; but let him not forget that they attest the activity of a reparative and benign process in the absence of which his best efforts would have come to naught.

In these days we hear from the pulpit the doctrine that evil is good in the process of making. Quite as defensible is the proposition that Disease is renewed health in the process of making; that it is a struggle against external foes, a reaction in the face of adverse conditions; a more or less painful effort on the part of the organism in the interest of health and life to readjust its internal relations to its external relations.

Methods in the Examination of Applicants for Pensions by the U. S. Pension Examining Surgeons

BY

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THE Commissioners of Pensions in their wise deliberations, have constituted Boards of Examiners for all sick or wounded, whose disabilities have occurred in the service of the armies or navies of the United States. These Medical Boards consist of three physicians and surgeons of experience and integrity, many of them having seen service during our country's wars; any one of them competent by himself to make a complete examination. These Boards, consisting of three members, effectually prevent the exercise of partiality or neglect, in the examination, to the prejudice of the applicant or the Government. These Boards often contain men possessing special fitness for certain duties, in the examination,—when specialists are often of special value,—yet the requirements are so plain and definite, that the average practitioner of experience is able to report a fair and just examination.

It is often of advantage in time and judgment, for the pensioner to be examined separately in the different departments by the member who possesses a special fitness for the duty, as the eye, the chest, the viscera of the abdomen, urinology, wound ulcers, cicatrices, rheumatism and special chronic affections, especially when some taint of venereal affection may be suspected to exist, always keeping the mind free from prejudice or any pre-conceived opinion in regard to the conditions that might be presumed to exist in any case.

The examiner should always be free to accept the conditions, that he may find. This there can be no doubt is the intention and purpose of every examiner. Finally the candidate is examined collectively by all the members of the Board, the attention being

naturally directed to the disability found, or the absence of the diseased condition claimed, a fair basis for opinion is now formed and little time is wasted in the disputation of fancied theories or imagining speculations. An example of this idea came under my observation in the person of an old army surgeon of great ability and accomplishments. He conceived the idea that all the chronic ills of soldiers—and by inference everybody else—were due to the latent effect of syphilis, and he would charge this theory upon every one he examined in private and army practice and, strange to say, by his adroit manner, partaking, at times of sophistry, he would often establish his diagnosis on the admission of the patient, without any reasonable or tangible symptoms to support the theory. He would often refer to himself as having a severe heart lesion all due to syphilis.

Where there is a separate and collective examination made there is very little time wasted in speculative argument or the advocacy of fancied theories of diagnosis. The real interest of the soldiers is not sacrificed to the egotistic views of argument presented in a delusive way that might deceive the elect, if the objective and subjective conditions are kept constantly in view. It would follow, therefore, that the examiner should have no theories to advocate or special ideas to inculcate. He is to make only intelligent and comprehensive records of the conditions really found to exist in the cases submitted for examination, with special reference to the interest of the soldier and the government as well.

That these views are strenuously adhered to by the Examining Boards there can be no real question. But in claims where the symptoms are entirely subjective, where nothing abnormal can be seen, felt or heard beyond the applicant's statement, it is often embarassing to form a just conclusion, when one fully feels the responsibility of his position, and the conclusions that must be formed from the report of the Examining Board, who having the case personally in hand ought to be able to form some just conclusion.

The claimant may represent, in his account of himself, innumerable pains and attacks of suffering, which at times, entirely

disable him from earning his living: for no sooner has he recovered from one seizure, then he experiences a recurrence, which keeps him altogether on the sick list, or as a disabled invalid. In these cases a reasonable discretion may be allowed the Board, for if the party has suffered and continues to suffer as he claims, some effect of these depressing attacks will be left on the physical system, which the Board will be able to discern. No pensionable malady is likely to exist for any length of time without leaving the impression of its presence on the general organism. In like manner of objective conditions, large cicatrices, old fractures, diseases of the joints, when recovery has been as complete as possible and of which in civil practice no complaint would be made, when presented for examination, are sometimes represented as equalling the tortures of the inquisition. Here it would seem that the same allowance should be made for objective symptoms as for those of a subjective character. The object in all cases is, of course, to arrive at a correct and just conclusion, that will enable the reviewing medical referee to have an intelligent understanding of the real conditions existing in every case presented for examination before the various Medical Examining Boards of the country.

Muscular Rheumatism: Its Pathological Relations

BY

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I SUPPOSE I ought to apologize at the outset for having taken the liberty to obtrude upon your consideration this much discussed malady of the human family; however, since the pathology of rheumatism is generally conceded to be a *terra incognita* and since it is only by persistent exploration and investigation that we obtain a definite knowledge of unknown things, I conceive it to be permissable for any knight of the lancet and scalpel to enter the lists, and couch a lance in this tournament.

The literature of this subject is interesting because of its diversity, and for the further reason that it serves to illustrate the difficulties encountered by able investigators in the effort to arrive at a comprehensive and satisfactory conclusion as to its etiological and pathological factors.

Undoubtedly much confusion in regard to the pathological relations of rheumatism has arisen from the divergent views of those who have written on the subject. Many writers have endeavored to classify rheumatic affections by a nomenclature confining them to the particular localities in which the phenomena are manifested. The limits of this paper do not admit a review of the different opinions entertained by the various investigators of this subject; therefore, I shall refer to only those whose views are in accordance with the theory of rheumatic etiology, and pathology, that constitutes the object of this effort. Ballonius first used the word rheumatism as a designation expressing pains in the muscles; Chomel, in his classification, recognizes muscular rheumatism as one of its many forms of manifestation; Senator, in Ziemssen's Cyclopædia of Medicine, also classifies myopathy or myalgia, as one of its many forms. References of this character might be carried further if it were necessary. The chief

purpose of this paper being to establish, if possible, at least a reasonable presumption of a pathological connection between muscular or that which we usually designate as subjective rheumatism, and other associated phenomena which are so frequently and I think I am justified in stating, are usually observed on close inspection, let us consider some of the accompanying phenomena which we find associated with the rheumatic diathesis and which underlie other morbid manifestations without presenting any of the characteristic objective features of rheumatism.

The glandular system, for instance, rarely fails to present evidence of implication. Tonsilitis is a frequent feature in these cases; and I believe that any gentleman present who has recognized the intimacy existing between rheumatism and tonsilitis, and that the latter local manifestation is the offspring of the first general condition, and who has regulated his therapeutic measures accordingly, will bear witness to this assertion.

A swollen, inflamed testicle, in the absence of a specific history, will be found pathologically related to the same general diathesis. I am led to mention this fact because I have known of more than one instance where this feature has been diagnosed as a hernial protrusion into the scrotum, and efforts to remedy the condition with a truss have been attempted to the great discomfort of the patient, and a loss of prestige to the surgeon. Therefore, a swollen testicle should not be regarded as evidence of specific disease, or as a traumatic injury in the absence of confirmatory history, but as one of the integral features of rheumatic disease. The intestinal glands are often involved by reason of defective nervous stimulation and changes in the quality and quantity of the biliary secretions, resulting in the formation of coproliths or enteroliths in the intestinal tract. It is a generally established fact, I believe, that these intestinal obstructions are the result of a general rheumatism of the system. At all events experience with such cases has convinced me of the truth of the proposition, and that where the etiological element is recognized and treated accordingly, the situation is greatly simplified.

The best of teachers has taught me, furthermore, that the group of phenomena which we regard as constituting a case of

pneumonia, will in most or all cases, in the primary stage, yield readily to the class of remedies recognized as appropriate to a clearly defined rheumatic condition.

The liver as the storehouse of urea and the seat of its formation, is certain to be involved, and we usually, and probably may always find that organ in an imperfect functional condition. The spleen, as the chief source of uric acid formation, is also functionally deranged as an effect of the metabolic changes taking place in the system. The suprarenal capsules also exhibit characteristic functional, or structural changes in this connection. We will find on close examination that the pulmonary organs exhibit an imperfect performance of physiological function, due to the various obstructions peculiar to those organs from perverted or impaired nervous force, and from changes that have taken place in the circulating fluids. We also find the heart suffering from involvement in the rheumatic dyscrasia, evidenced by dilatation, hypertrophy, endocarditis, myocarditis, and other abnormalities peculiar to that organ.

Bouilland was the first writer of note to place the relations of rheumatism and cardiac disease on a comprehensive basis. He states that cardiac complications are the rule in rheumatism, and their non-occurrence the exception.

Dr. Longstreth, the author of a valuable monograph on this subject referring to internal complications, expresses the opinion that "It is a matter of some doubt in what manner these effects should be spoken of. Formerly they were considered as metastases of the rheumatic inflammation from the articulations to the internal viscera, but latterly it has been customary to describe them as complications.

It is probable, however, that to look upon them as multiple localizations of the same condition will afford us a more philosophical point of view of their nature and true relationships. In other words, the visceral, or extra abarticular localizations are really integral parts of the disease, quite as much as the joint or muscular affection and thus rheumatic heart holds a different relation to this disease from that of perforation of the intestine to typhoid fever, or pleurisy to relapsing fever."

I think it pertinent in this connection to quote the opinions of Dr. Ingram, a gentleman formerly connected with the medical department of the Pension Bureau: "I am disposed to criticize any suggestion that a soldier complaining of rheumatism is too often a malingerer. He, no doubt, suffers much at times, with possibly better days between attacks, but he suffers more or less all the time. The weather affects him. I look upon the nature of rheumatism as a grave disturbance of physiological processes constituting waste and repair. Physical and mental exercises break down the tissues. The processes of life are involved in this continuous breaking down and repair." In this last statement I conceive Dr. Ingram strikes the keynote of subjective rheumatism. When the processes of life are involved, we meet with a general functional derangement of the system. The scope of such a condition necessarily involves all the organs of the body concerned with the maintenance of physical existence.

I again quote Dr. Ingram: "My theoretical conclusions as to the pathological nature of rheumatism are to my mind very fully sustained by the rational measures I find most successful in the management or treatment of this disease. I have always believed that rheumatism is the result of a defective removal of the waste, or detritus from broken-down tissues."

When we consider that worn out, broken down tissues, ultimately act as poison in the system, and that the nervous structures are very sensitive to their presence, we can readily appreciate the presence of soreness and pain and the general disturbance of function in all the organs of the body. This view is further sustained by the fact that all those sensations which are designated as painful, aside from those which are due to traumatic influences, are due to nervous irritation arising from the presence of abnormal elements in the blood. Just as all skin diseases that are not specific or contagious arise from the same cause.

It is in conformity with a rational view of this subject to accept as a fact that the greater amount of wear and formation of waste tissue occur in those structures which are most taxed in the performance of the ordinary duties of life, the bones and muscles.

This waste tissue, by reason of imperfect elimination, accumulates in the system and is carried through the channels of the circulation to all parts of the body, thereby developing morbid phenomena in every organ and structure.

The cardiac lesions met with in connection with the rheumatic diathesis deserve more than a passing notice. Regardless of what may be considered normal the fact that blood pressure increases as we approach the heart explains the relative frequency of aortic and other cardiac lesions arising from hypertension. Arteriofibrosis and arteriosclerosis are the results of perverted metabolism following contraction of the peripheral channels of the circulation, retained broken-down tissue being the primary cause. Ischemia, rather than anemia, is most often observed in connection with marked lithemic conditions.

Stengle maintains that the lithemic subject is not so pale as sallow; sub-dermal tissue has shrunken, and the dry, inelastic skin closes down upon the irregular contour of bone and muscle. In stating his opinions concerning the pathological changes due to rheumatism, Dr. R. B. Baker says, "In this connection may be mentioned the so-called rheumatism of many claimants for pension, showing well marked evidence of arterial disease, with but little or none of the joint changes of rheumatism."

Dr. Cook, of Richmond, Va., truly says that "the causes of death may be divided into two groups, traumatic, including infection, and the wear and tear of life." Osler holds that a person rarely dies of the disease which is the cause of the primary attack, but from the toxic conditions developed during the progress of the disease, elements of morbid action which Flexner designates as "terminal infections."

Given a case in which muscular rheumatism is alleged and in which the characteristic arterial, cardiac and pulmonary changes are noted, are we not justified in believing that the allegation of muscular rheumatism is well founded, and entitled to a separate rating under the general pension laws? I am decidedly of the opinion that we are.

Why is it that the allegation of rheumatism of a subjective character is so arbitrarily rejected, when other conditions of

equally subjective character are not only admitted as evidence but we are instructed to consider them?

As for instance: In a case where malarial poisoning is alleged, we are instructed that the claimant, "should have full opportunity to explain his *subjective symptoms.*"

When diseases of the brain and spinal cord are alleged, we are instructed to accept the patient's statemants as to vertigo spasms and convulsions, also in regard to sensory disturbances. Again when sunstroke is alleged our instructions are based almost entirely on subjective conditions. This is true of many other ailments to which the attention of an examining board is drawn in dealing with the survivors of the Civil war. It often seems to me that the Pension Department treats with scant courtesy these brave men to whom we are indebted for a united country and other advantages which they secured for us at a frightful cost of blood and suffering. Why should a soldier be treated as a liar and malingerer, when muscular rheumatism is alleged, notwithstanding the fact that it is the most common result of the terrible exposures they have undergone, while at the same time examining boards are *instructed to accept his statements in regard to subjective sensations in other conditions?* What is there about this particular subjective condition that casts a suspicion of mendacity upon the soldier?

How true are the words of Kipling:

"In troops we ship him to the scene
And while we sit at home,
Tommy bears the brunt,
Fighting for his Country and his Queen."

President's Address

BY

CHARLES JAMES FOX, M. D., HARTFORD, CONNECTICUT.

Fellow Examiners:

The honor of presiding over the deliberations of the Fifth Annual Convention is one, I can assure you, most keenly appreciated, and for this, the highest honor within the gift of the members of our Association, I desire to present my grateful thanks.

It is a matter of no little interest to each one of us to assemble at this annual gathering and discuss the live questions of the hour that are presented in the valuable scientific papers before this convention. The restless activity of the earnest workers and our pension experiences from time to time are continually bringing to us valuable subjects for our careful consideration. These matters require our best judgment and painstaking care. Primarily the objects of this Association from a scientific view are: "to improve ourselves in those branches of the science and art of medicine and surgery which are involved in the performance of the duties of Pension Examining Surgeons," and thus place ourselves under a better understanding between the members of our Association and the Pension Bureau.

Much can be said about the benefits and advantages of organization, and though professional and other duties may prevent attendance at a given meeting of our National Association, yet if each member will but endeavor to participate in as many meetings as he can, he may count the time so occupied as well spent. Such annual conferences as these are of great value to us, members of the medical profession, for here each may add his experience to that of others and has the far wider experience of others added to his own.

The progressive pension examiner always strives in a conscientious way to sustain the close and confidential relations between the government and ourselves, and enjoys these annual

conventions, replete always with new ideas and valuable suggestions.

Professor Osler once truly said, "The master word in medicine is *work*." Association is absolutely necessary and essential for the best interests of our work. By its broadening influences, and its exchange of experiences and ideas we receive a stimulus which is a potent factor in our progress.

Without work in association, there is no advancement in professional development. We do not truly appreciate our own limitations, our own ignorance, actual or relative; until we come in contact with others better advanced or better qualified.

We, as a body, have been in progressive growth for over four years and our examiners have faithfully perfected themselves in the work entrusted to them and so have done their part, and I believe the Department will admit our efficiency in the service, marked each year by a steady improvement under the stimulating influence of our Association. Is it not the opportune time to propose to have our future work further compensated and gracefully ask Congress to do something for us? The necessities of our Association are commensurate with its growth, and the upward progress it steadily makes must be jealously watched and jealously maintained. To prune away the useless and worn out branches of our vine and replace them as required by advanced and improved cultures in harmony with the life of to-day, calls from us one and all our highest and most energetic efforts. Let us enter upon them in the future with an earnestness born of loyalty to our profession, and of supreme hope for the lasting good of our Association.

Our circular letter of invitation accompanied by the Medical Referee's endorsement has been issued during the past year by the officers of the Association with a gratifying increase to our roster of membership. Out of some forty-five hundred available examiners it would seem as though we should soon attain the 1,000 mark in our enrollment. Then, and not till then, could we hope for a potent legislative influence upon Congress to correct many existing grievances. I believe, however, that even now, a joint committee for the consideration of this subject, to be

appointed by this body and the Pension Bureau, could be of practical utility and value, at least in the suggestions which it might make.

There is another thing that might be said. Vol. I, II, and III, of our proceedings are ever, by reason of their scientific pages, a perpetual monument and a credit to this organization. The Medical Examiner and Practitioner, our official organ, is now an established and recognized necessity to every member of the National Association of United States Pension Examining Surgeons.

Let me, in closing, assure you one and all that my continual interest in your future prosperity will still remain, and I shall ever cherish the year past while your presiding officer as one of the brightest chapters in my professional remembrance, and I wish to thank the Executive Committee, the officers, and especially the Secretary, who has been in so many ways, contributory to the gratifying success of our Fifth Annual Convention.

OBITUARY NOTICES

JACOB F. RAUB, M. D.

WASHINGTON, D. C.

1840-1906.

NO one name is so closely identified with the conception and early history of our Association, as is that of Dr. Jacob F. Raub. While the suggestion of such an organization emanated from the mind of another, its successful realization was made possible by the unqualified and steadfast support of Dr. Raub, who at that time was Medical Referee of the Bureau. When it was first suggested to him that such an organization should be effected among the Pension Examining surgeons of the State of New York, he not only honored the idea by his official sanction, but so popularized the movement, that nine states instead of one, were represented at our initial meeting at Saratoga Springs. His presence on that occasion, was in itself, sufficient to guarantee its success. He came to that convention with the expressed hope that "he might meet face to face every pension examining surgeon in New York state."

Such of us as were present at that meeting will always cherish a fond remembrance of his genial manner and untiring devotion to the welfare of the examining surgeon.

From that day until his untimely death on May 21, 1906, he never lost an opportunity, either by word or act to promote the interests of our young Association. Prior to his death he missed only one of our conventions; always taking a most active part in their deliberations. Less than one week before he died, he wrote a long letter to a prominent member of the Association deeply regretting, on account of the ill health of Mrs. Raub, his

inability to attend the Boston meeting. In this letter, so characteristic of the man, was strikingly displayed in his loyalty and devotion to those he loved. In it, he spoke so tenderly of her he loved, hoping and believing she would be spared to him. Yet in the midst of this sorrow, his mind went out to that organization, to which he had been so devoted, and though weighed down with sorrow, he found time in which to make several suggestions of vital importance to the future success of the Association, of which he was an honorary member. Though he is gone, his influence will live after him. Though the Association can no longer listen to his wise counsel, it will always cherish the fondest recollections of him, who was ever mindful of and did so much for its prosperity.

Jacob F. Raub was born May 13, 1840, at Raubsville, Pa. He was educated in the public schools, in Phillips Academy and began the study of medicine in 1858. In 1864 he was graduated in medicine from the Long Island Medical College, in Brooklyn.

In August, 1862, he enlisted as a private in Company K, 129th Regiment, Pennsylvania Volunteers. He was present at the battles of Bull Run, Antietam, Shepherdstown, Fredericksburg, and Chancellorsville. At Chancellorsville he took part in a hand-to-hand fight for the colors of his regiment against a Louisiana regiment, bringing them safely from the field, and a prisoner with them. In May, 1864 he was appointed assistant surgeon and assigned to duty at Washington, D. C. Later he was relieved at his own request, that he might go to the front, where he was assigned to duty in the Sixth Corps Field Hospital. In this position he served during Grant's Wilderness campaign. After this he assisted in transferring the Sixth Corps Field Hospital from White House, Va., to City Point, Va., after which he was transferred to the Fifth Corps Hospital and placed in charge of a section, including the officers' ward and during an outbreak of smallpox, had charge of the smallpox ward.

A few days after the battle of Hatcher's Run (February 5 and 6, 1865) he was detached from the 210th Pennsylvania Volunteers and assigned to duty on the staff of General Wainwright, commanding the 5th Corps Artillery Brigade. Here he

served during the battle of Five Forks, and the retreat and surrender of General Lee, after which he was ordered back to his regiment, being honorably discharged at Arlington Heights, on May 30, 1865.

On June 20, 1865, he began the practice of medicine at Mount Bethel, Pa., remaining there until September 1, 1886. From October 1, 1886, until April 1, 1887, he pursued a special course at the Philadelphia Polyclinic and the Medico-Chirurgical College, Philadelphia, Pa., specializing in diseases of the eye, ear, nose, throat and skin. He then resumed general practice, locating at Bangor, Pa., in 1887. Leaving there in September, 1887, he moved to Bethlehem, Pa., where he limited his practice to diseases of the eye, ear, nose, throat and skin.

On October 9, 1890, he accepted the position of Medical Examiner in the Bureau of Pensions. In May, 1893, he was appointed Chief of the Eye Section, which position he held until Hon. H. Clay Evans made him Medical Referee in 1897. He remained at the head of the Bureau until September 27, 1902, when he again resumed charge of the eye section, remaining there until his death on May 21, 1906.

From February 10, 1871, until August 10, 1885, he was United States Examining Surgeon for the northern part of Northampton County, Pa., and from August 10, 1885, to July 15, 1889, a member and secretary of the board of such surgeons at Easton, Pa. From May 19, 1873, to November 27, 1885, he was postmaster at Mount Bethel, Pa. He was a member of the Medical Society of Northampton County, Pa., since 1871, of the Medical Society of Pennsylvania since 1875, of the American Medical Association, and an honorary member of the National Association of United States Pension Examining Surgeons. During the railroad riots at Reading in 1877, he was surgeon of the Fourth Regiment, National Guard of Pennsylvania. He was a member of the Guard of Honor around the body of President McKinley at the White House, and of the special Grand Army of the Republic guard thence to the capitol in September, 1901. He was an active Free Mason, Odd Fellow, Red Man and Knight

of Pythias, and held many of the important offices in each.

He was also a companion of the first class of the military order of the Loyal Legion of the United States. He is survived by his widow, and his children, Mrs. Luther F. Speer and Austin J. Raub, all of Washington, D. C. He was buried with masonic honors at Arlington on May 23, 1906. He was a member of the Metropolitan Presbyterian Church, of Washington, D. C.

FORDYCE H. BENEDICT, M. D.

WEEDSPORT, N. Y.

1841-1906.

Fordyce H. Benedict, M. D., of Weedsport, N. Y., was one of the leading practitioners of Cayuga County. He was born at Andes, Delaware County, N. Y. on August 19, 1841. He received his early education at Andes, and at the Delaware Literary Institute at Franklin.

On August 14, 1862, he enlisted in Co. D, 144th New York Volunteer Infantry, and was sent to the defense of Washington, at Camp Chase. In the Spring of 1863, they were ordered to Yorktown, Va., from there to Richmond and later to Gettysburg, but their train was wrecked and Dr. Benedict was badly injured. After spending several months in the Army Square Hospital, he was sent home on a furlough. At its expiration he returned to the hospital, where he was detailed on detached service as Hospital Steward. He later assisted the well known Dr. D. W. Bliss and remained in active hospital work until the close of the war. He then returned to Franklin and read medicine with A. E. Sullard, M. D., then attended the Albany Medical College, from which he was graduated in 1868.

Dr. Benedict then located at Weedsport, where his skill won for him the leading medical and surgical practice in this locality. In 1900 he was appointed a member of the Auburn Board of

United States Pension Examining Surgeons, serving most faithfully in that capacity for nearly six years. He was a member of the Cayuga County Medical Society, and of the Weedsport Lodge of the F. and A. M. After a brief illness of two weeks, he died at his home at Weedsport on March 8, 1906.

JOHN W. COOPER, M. D.

ELKTON, MD.

1850-1906.

Dr. John W. Cooper died at eleven o'clock, Saturday morning, March 10, 1906, at his home on East Main Street, Elkton, Md., after a tedious illness of heart trouble.

Dr. Cooper was a member of one of Delaware's most prominent families, being a son of the late John W., and Susan Dill Cooper. He was born in Kent County, Del., February 16, 1850. After a preliminary preparation at Felton Academy, and the Bryant and Stratton's Business College, he entered Hahnemann Medical College, Philadelphia, where he was graduated in 1884. After a year at Chestertown, he moved to Elkton, where since 1886, he actively engaged in the practice of his profession. At various times he filled the offices of Jail Physician, Physician to the Almshouse, County Health Office and United States Pension Examining Surgeon.

Dr. Cooper was a member of the Union Lodge, No. 48, F. & A. M., of Elkton, and was buried with their ceremonies March 13, 1906.

In 1889 he married Miss Anna Wells, only daughter of the late Joseph Wells, who, with two daughters, Helen and Cornelia, survives him. Two brothers are also physicians, Dr. Peter Cooper, of Wilmington, Del., and Dr. Thomas Cooper, of Chestertown, Md.

A skilful physician, he was of that quiet, unassuming nature that never intrudes, yet always answers to the call of duty. Free

from the envies and jealousies that so often mar the dispositions of professional men, he kept the even tenor of his way. Keenly alive to all public interests, he formed a strong link on the chain that completes a sturdy citizenship.

Would that others might emulate the lofty standard which he set by his daily life.

LOWELL HOLBROOK, M. D.

THOMPSON, CONN.

1818-1905.

On September 29, 1905, occurred the death of Dr. Lowell Holbrook, one of the oldest and best known practitioners of the State of Connecticut. He was born in, and passed practically his entire life in the town of Thompson. The public school of his native town prepared him for entrance into Monson Academy, from which institution he was graduated in 1836. Eight years later he began the study of medicine at the University Medical College in the city of New York, receiving his degree therefrom in 1849.

In 1845 he married Miss Mary Fisher, who died on November 16, 1890.

Dr. Holbrook was a member of the State legislature in 1879.

He was appointed a member of the Willimantic Board of Pension Examining Surgeons by President McKinley, was its President and a most valuable member until his decease.

For many years he was Health Officer of his town and Medical Examiner for the Coroner of Windham County. He always affiliated with his county and state medical societies, being an ex-President of each. In 1862 he enlisted in the 18th Connecticut Regiment, was made Surgeon of the same, and did active service until the close of the war. He was an honored member of the Congregational Church, broad minded in his views, and always exhibited the sterling qualities of good citizenship so

dominant in the lives of his confreres. His fifty years' service to the people of Thompson, endeared him to one and all.

CHARLES JAMES FOX, M. D.

Hartford, Conn., June 15, 1906.

THOMAS ROSS, M. D.

SACRAMENTO, CAL.

1839-1906.

On the morning of the 11th of February Dr. Thomas Ross, councilor for the eighth district and an ex-president of the State Society, died at his home in Sacramento, from cerebral hemorrhage. Dr. Ross was president of the State Society in 1901, and in the transactions of that year appeared the following brief biography:

Thomas Ross was born of Highland Scotch parents in Lancaster, Ontario, Canada, on November 26, 1839. He was educated in the Glengarry County Grammar School, in St. Andrew's Academy, Argenteul County, Quebec, and in McGill University, Montreal, where he graduated in 1863, receiving the degree of M. D. C. M. Dr. Ross located in Lancaster, his native town, until 1864, when he came to California and located in Woodland, Yolo County, where he practiced medicine until 1893. He then came to Sacramento to take charge of the practice of Dr. M. Gardner, the former chief surgeon of the S. P. Co., during his visit to Europe. Dr. Ross was county physician of Yolo County for four years and mayor of Woodland from 1891 to 1893, when he resigned. He was always interested in the work of local and state medical societies. He was the first president of the Yolo County Medical Society, treasurer of the Medical Society of the State of California, from 1895 to 1900, when, at its session in San Francisco, he was elected president. Dr. Ross had been a member of the State Medical Society since 1871, and had the honor of being a permanent member. He had been chairman of

several standing committees, and read several papers before the society. Dr. Ross had been physician to the Southern Pacific Company's hospital in Sacramento, president of the Sacramento City Board of Health and president of the Board of Examining Surgeons for Pensions in Sacramento. Dr. Ross presided at the annual session of the State Medical Society held in Sacramento in April, 1901, which was one of the most successful meetings in the history of the society.

Those who have been habitual attendants at the meetings of the State Society will miss Dr. Ross very much. He was one of the most regular attendants, and his pleasant word and cheerful smile had come to be almost official parts of a meeting of the State Society.

REUBEN V. SPACKMAN, M. D.

DUBOIS, PA.

1838-1906.

Dr. Reuben V. Spackman was born March 30, 1838, near Bellefonte, Center Co., Pa. He died March 20, 1906, aged 67 years, 11 months and 20 days.

Some years after his birth the family moved to or near Curwensville, Clearfield Co., Pa. Though residing on a farm, the doctor received his early education in the public schools of Clearfield County. He then clerked in the stores of Clearfield until 1866, in which year he entered the office of the late Dr. Woods to begin the study of medicine. In the fall of that year, he entered the Jefferson Medical College. After completing one year's work at that institution, he located in the spring of 1867 at Luthersburg, Pa., where he pursued the practice of medicine until the fall of 1869. He then re-entered the Jefferson Medical College, receiving therefrom the degree of M. D. in 1870. After this he resumed his practice at Luthersburg, remaining there until 1890, in which year he moved to Dubois, Pa.

In 1897 he was appointed on the Board of Pension Examining Surgeons, at that place, being its first president and serving as such until the time of his death. In him, the soldiers found a true friend, and the Government, an able and conscientious servant.

His life and his works were a credit and an honor to the medical profession, of which he was ever proud, and for the higher attainments of which he was ever solicitous. He was actively interested in the Clearfield County and the Pennsylvania State Medical Societies, never losing an opportunity to advance the best interests of his profession.

He was a member of the local Board of Education, Health Officer of Dubois and public-spirited on every subject. He belonged to the Presbyterian Church. Though twice married, he leaves but one child, of his first wife, Dr. James P. Spackman.

It can be truly said of him, that he was a valued, upright and honorable citizen, and a good physician.

W. J. SMATHERS, M. D.

Dubois, Pa., June 14, 1906.

MILTON CURTIS WEDGEWOOD, M. D.

LEWISTON, ME.

1832-1906.

Milton Curtis Wedgewood, M. D. was born in Bowdoin, Me., on December 23, 1832, and was the son of Curtis Wedgewood and Hannah Springer Wedgewood. The doctor received his literary education at the Litchfield (Me.) Institute, and his medical degree from Bowdoin. In 1862, he was appointed assistant surgeon to the 11th Regiment of Maine Volunteers, serving his country in the capacity of surgeon until the close of the war. He then settled at Lewiston, where he enjoyed a large and remunerative practice for over forty years. His practice, which grew constantly during these many years, was established

in a clientele of the most exacting sort, his patients being among the leading citizens.

Dr. Wedgewood was widely recognized as one of the most successful family physicians within many miles of his home. During a portion of each year he was located at Poland Springs, where men and women of national reputation came under his professional care. With them, as with all of his patients, he was a great favorite. He was regarded by many of them with feelings akin to love, by reason of his tender solicitude, his keen appreciation of their needs in times of illness, and his great skill in the treatment of disease.

As a physician, Dr. Wedgewood received many honors at the hands of his profession. He was an ex-President of the State Medical Association, ex-President of the Academy of Medicine and Science, and ex-President of the Androscoggin County Medical Association. He was one of the leaders in the organization of the Central Maine General Hospital of Lewiston, and was always deeply interested in maintaining its high standard of service. He served as a member of the Executive Council during Governor Burleigh's last term, and during Governor Hill's administration. Governor Cleaves appointed him a member of the Maine Board of Health, which position he filled in a most satisfactory manner. For many years he was actively foremost in Masonic circles—a member of Lewiston Commandery, Knights Templar, of the Lewiston Lodge of Perfection, H. H. Dickey Chapter of the Rose Croix, Auburn Council, Princes of Jerusalem, and of the Maine Consistory, 32nd degree. He also belonged to the Royal Arcanum and other secret and beneficent organizations. He was a faithful friend and attendant at the Pine Street Congregational Church in Lewiston. In 1862 he was married to Elizabeth J. Webster, who survives him. In his view of life, he was full of the spirit of revolution, against false doctrines, against dishonesty, against graft and against any form of double dealing. His long life so filled with successes and achievements, came to an end on April 9, 1906.

HORATIO WOODBURY, M. D.

SOUTH PARIS, ME.

1852-1905.

Dr. Horatio Woodbury was born at Danville, Maine, July 12, 1852, and died at South Paris, Me., July 12, 1905. He was graduated from Bates College in 1876, after which he taught school for three years. He then began the study of medicine with the late Dr. Rounds, entered the Maine Medical College, and received his degree therefrom in 1882. In the same year he began practice at Wiscasset, Me., remaining there until 1885, in which year he removed to South Paris. Here he was in continuous practice until the time of his death.

Like the family physician in most communities, Dr. Woodbury was held in high esteem as a man and as a physician. Kind in disposition, efficient in his professional duties, public spirited in all that pertained to the welfare of the community, he was indeed a man whose influence was ever potent. As a member of the Board of Education, he was for years energetic in improving the educational advantages of the town in which he lived. He was for several years Health Officer of South Paris. In 1897, he was appointed Pension Examiner on the South Paris board, and served as its secretary from that time until his death. He was a member of the South Paris Lodge of F. and A. M., being for two years its Master, and for ten years its Secretary. He was also a member of the Oxford Chapter, R. A. M. of Norway, of the Hamlin Lodge of Knights of Pythias, of South Paris, of the Androscoggin Lodge of Odd Fellows, of Auburn, and of the Mt. Pleasant Rebekah Lodge of South Paris.

Dr. Woodbury, a few years ago, married Mrs. Lila S. Briggs, who survives him. Two sons of hers, Harold T., and Donald S., have been members of the family. He had no children.

HORACE WARDNER, M. D.

LA PORTE, IND.

1829-1905.

The subject of this sketch was a native of the State of New York, being the son of Philip Wardner and Maria Frisby. He was of German extraction, and inherited much of the thrift and intelligence of his prominent ancestors.

Like many of the most successful professional and business men of the present day, Horace Wardner was reared on the farm, received his earliest education in the district school, subsequently finishing his academic training at Alfred University. For ten years he was a successful teacher in the schools of Western New York. In 1852 he began the study of medicine under the companionship of Dr. W. B. Alley, of Almond, N. Y. The years of 1853 and 1854 found him again teaching, first at Milwaukee and then at Geneva, Wis. During this time, however, he never abandoned the study of medicine and in the Fall of 1854 he matriculated at Rush Medical College, Chicago, securing his degree therefrom in 1856.

After practicing a few months at Libertyville, Ill., he returned to Chicago, remaining there until the beginning of the Civil war. In 1859-60 he was demonstrator of anatomy in what is now the Chicago Medical College. In 1861 Dr. Wardner received his first commission as surgeon in the Twelfth Illinois Regiment. From this time until 1866, or more than one year after the close of the war, he was prominently identified with the hospital service of the Federal government. His long and faithful service was repeatedly acknowledged by successive promotions. He was not mustered out of service until September 1, 1866. In November following, in connection with the sisters, who had been associated with him as nurses during the war, he founded St. Mary's Infirmary, at Cairo, Ill. This institution flourished under his wise and skilful management, receiving his attention for about ten years. While at this place he became a member of the Illinois Board of Health and for two years was President of that body. He was later made Superintendent of

the Southern Illinois Hospital for the Insane at Amo, which position he held for twelve years.

In 1891 he took up his residence at La Porte, Ind., again taking up his favorite work of institutional management. For the next nine years he conducted the Interlaken Sanitarium, disposing of the same to an organized company in 1900. After three years of private practice he again resumed the management of the above institution which became famous under his skilful guidance.

Dr. Wardner was President of the La Porte Board of United States Pension Examining Surgeons, ex-President of the La Porte County Medical Society, member of American Medicial Association and Indiana State Medical Association. He was a member of the Loyal Legion, the Knights Templar, and the Army of the Tennessee. After nearly fifty years of devoted service to his profession, he died on March 17, 1905. His funeral services were conducted with Masonic ceremonies and were commensurate with the exalted position which for so many years he had enjoyed among his fellowmen.

ALBERT WILSON, M. D.

SIDNEY, OHIO.

1826-1905.

Albert Wilson, for many years pension examiner, either as single surgeon, or as a member of a board of surgeons, died while holding the latter position, at Sidney, Ohio, June 2nd, 1905. He was born at Hardin, Ohio, a small village five miles from the county seat, November 14th, 1826. Until eighteen years of age he lived with his father on a farm and received such education as could be obtained at a country school. He then commenced teaching in the common schools of the county, and later began the

study of medicine with Dr. H. S. Conklin, at that time a very prominent member of the profession in Ohio.

After preliminary reading as was the practice at that time he took the courses of lectures at the Medical College of Ohio and graduated therefrom with high honors. He remained in the hospital as interne, for one year, and then returned to Sidney to begin a successful medical career which lasted one year more than half a century.

At the outbreak of the Civil war he responded immediately. He was the first man to enlist in Shelby County, and went out one of the first seventy-five thousand. On the 18th of April, 1861 he was commissioned Assistant Surgeon and assigned to the First Ohio Volunteer Infantry Regiment. He was at the battle of Bull Run and took part in all the campaigns with his regiment until August 18th, 1863 when he was promoted Surgeon with the rank of major, and assigned to duty with the 113th Ohio Infantry Regiment. With this organization he continued until the close of the war.

Dr. Wilson's record of service for the government is as good as the best. His physique was robust, of sound body and good health, muscles trained in a life of outdoor activity he was at all times ready for duty, of which he had an acute sense of obligation. He was never known to slight his work, however disagreeable. He was brave to rashness. Energetic and industrious to the last day of his life, fatigue never claimed him as a victim. Of sound mind in a sound body, an honest man, the noblest work of God. A man of intense convictions, he had no patience with shams, shoddy and pretense. His loyalty to country, party and friends was never open to question.

He was married to Miss Irene Ayers in 1871, who with their only child, Miss Jessie Ayers Wilson, survives him.

Dr. Albert Wilson was elected a member of the Military Order of the United States, Commandery of the State of Ohio, March 2nd, 1887, Insignia 5386. He remained an active and consistent member of this order until the time of his death, at which time his surviving comrades issued resolutions in

memoriam, signed by Major General J. Warren Keifer, Commander.

His last extended journey from home was in attendance at the meeting of the National Association of United States Pension Examining Surgeons at Washington.

Seldom ill during his long and busy life, he passed the river in greater calm and with less suffering than the most of us must expect. Retiring at night in almost usual health, in the morning he lay still in death. Every lineament of face and figure showed that life had passed without a struggle.

DAVID R. SILVER.

Sidney, Ohio, June 25, 1906.

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